

## University of North Dakota UND Scholarly Commons

Theses and Dissertations

Theses, Dissertations, and Senior Projects

January 2016

### Teacher Perceptions Of Facilitated Video Analysis Of Instruction In Teacher Professional Development

Benson Ayang Bakabaka

How does access to this work benefit you? Let us know!

Follow this and additional works at: https://commons.und.edu/theses

#### **Recommended Citation**

Bakabaka, Benson Ayang, "Teacher Perceptions Of Facilitated Video Analysis Of Instruction In Teacher Professional Development" (2016). *Theses and Dissertations*. 1989. https://commons.und.edu/theses/1989

This Dissertation is brought to you for free and open access by the Theses, Dissertations, and Senior Projects at UND Scholarly Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UND Scholarly Commons. For more information, please contact und.commons@library.und.edu.

### TEACHER PERCEPTIONS OF FACILITATED VIDEO ANALYSIS OF INSTRUCTION IN TEACHER PROFESSIONAL DEVELOPMENT

by

# Benson A. Bakabaka Bachelors in Teaching & Learning, University of Yaoundé 2004 M. Sc. Education, University of North Dakota, 2011

#### A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

In partial fulfillment of the requirements

For the degree of

**Doctor of Education** 

Grand Forks, North Dakota
December
2016

This dissertation, submitted by Benson A. Bakabaka in partial fulfillment of the requirements for the Degree of Doctor of Education from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

Dr. Mark Guy, Chairperson

Dr. Marcus Weaver-Hightower

Dr Kathy Smart

Dr. Rick Van Eck

This dissertation is being submitted by the appointed advisory committee as having met all of the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.

Dean of the School of Graduate Studies

Grant McGimsey

Date

#### PERMISSION

Title Teacher Perceptions of Facilitated Video Analysis of Instruction in

**Teacher Professional Development** 

Department Teaching and Learning

Degree Doctor of Education

In presenting this dissertation in partial fulfillment of the requirements for a graduate degree from the University of North Dakota, I agree that the library of this University shall make it freely available for inspection. I further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised my dissertation work or, in his absence, by the Chairperson of the department or the dean of the School of Graduate Studies. It is understood that any copying or publication or other use of this dissertation or part thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the University of North Dakota in any scholarly use which may be made of any material in my dissertation.

Benson A. Bakabaka December 1, 2016

#### TABLE OF CONTENTS

LIST OF T	ABLESx
ACKNOW	LEDGEMENTSxi
ABSTRAC	Txiii
CHAPTER	
I.	INTRODUCTION
	Statement of Problem7
	Purpose of Study9
	Research Questions
	Significance of Study
	Unique Contributions
	Implications
	Definitions of Terms
	Scope
	Limitations
	Background
	Chapter Summary
II.	LITERATURE REVIEW
	Procedure for Literature Search
	Introduction

	Video of Instruction Supporting Noticing and Remediating Learning	20
	Video of Instruction Supporting Teacher Reflection	25
	Video of Instruction Supporting Collegiality	32
	Video Instruction Supporting Teacher Confidence	36
	Professional Learning Community	40
	Conclusion	42
III.	RESEARCH DESIGN METHOD	45
	Theoretical Framework	45
	Qualitative Methods	46
	Constructivist Theoretical Framework	46
	Research Design	52
	Research Questions	55
	Background	55
	Participants	56
	Instruments and Criteria for Videos of Instruction Selection	62
	Data Collection	65
	Interviews	66
	Pre-interview	66
	Survey	67
	Focus Group Analysis	67
	Post Interviews	68
	Documents	68

	Consent and Confidentiality69
	Data Analysis Procedures70
	Coding Procedure Illustration71
	Data Analysis74
	Chapter Summary76
IV.	FINDINGS77
	Research Questions
	Data Types77
	Summary of Themes
	Scaffolding Experience
	Classroom Management Issues
	Learning through Reflection
	Mutual Learning among Participants80
	The Power of Analysis
	Consequential Impact of FAVAI82
	Theme One: FAVAI Providing Scaffolding for the Teachers' Pedagogical Knowledge
	Theme Two: FAVAI Provided a Suitable Platform for the BVP Inservice Teachers to Understand Classroom Management
	Theme Three: FAVAI Initiated and Sustained Teacher Reflection among these Inservice Teachers98
	Theme Four: FAVAI Provides an Environment for Mutual Learning that Exceeds what Teachers Found Individually 103
	Theme Five: FAVAI had a Powerful Impact on the Teachers' Analysis of Teaching
	1 CUCHCIS / MICH VOIS OF 1 CUCHHIEZ

	Ineme Six: FAVAI had Consequential impacts on the Inservice Teachers' Professional Development as well as their Students	110
	Conclusion	116
	Summary and Conclusion on Themes	117
V. DISC	CUSSION	120
	Background and Purpose of Study	121
	Assertions of Findings and Discussion	123
	Assertion One: FAVAI by the Inservice Teacher Participants Providing a Scaffolding Experience to Enhance Learning	123
	Assertion Two: Teacher Reflections during FAVAI Intuitively Yielded New Knowledge	127
	Assertion Three: FAVAI by the Inservice Teachers Strongly Impacted them and could Possibly Affect their Students as Well	130
	Concrete Connections and Unexpected Findings	137
	Implications for Practice	140
	Directions for Future Research	147
	Conclusion	148
APPENDICES		151
Appendix A:	Request to Conduct Research in the Grand Forks Public Schools	152
Appendix B:	The University of North Dakota Consent to Participate in Research	153
Appendix C:	Interview Protocol	156
Appendix D:	List of Codes Substantiating Categories and Themes	160

-		• -	-	_
1,	·		•	-
п	·		1	

#### LIST OF TABLES

Γable	F	Page
1.	Participant Descriptions	61
2.	The Six Phases of the Study	76
3.	Percentage Summary of Themes	79
4.	Themes and Assertion	149

#### **ACKNOWLEDGMENTS**

I wish to express my sincere appreciation to the members of my Advisory Committee for their guidance and support during my time in the Doctoral program at the University of North Dakota. I think particularly of my committee chair, Dr. Mark Guy, who was very supportive of me during my work on this project. I also appreciate the craftsmanship of my committee members, Drs. Marcus Weaver-Hightower, Kathy Smart, and Richard Van Eck, who made useful suggestions that contributed to the completion of this project. Dr. Robert Kelly, who encouraged me to go into the Teacher Ed. Program in Summer 2012, cannot be forgotten. The professionalism and motivation of Dr. Rilla Anderson of EFR, who was also my first UND professor, initiated me into the American system of education. Without her motivational skills, it would have been near impossible for me to succeed in this program. Dr. Donna Pearson was my advisor during my Master's degree, and she did a great job of training me in writing and research procedures. I received a lot of help from Catherine Gillach, UND professors, the Chester Fritz librarians especially Kristen Borysewicz, Janet Rex, and Megan Carroll, as well as the very friendly Grand Forks community. I have words of thanks for my elder brother, Mr. Ayang Frederick E., who spoke enlightenment and academic boldness into my life. The last people to mention are the most important figures in my life, my father and mother, Mr. Ayang L. Enoh and Mrs. Ayang Mary E. They showed me much love and told me repeatedly that wherever my "pen" can take me to, I will be! That was colossal

motivation which has never ceased to inspire me through thick and thin. I may not be able to remember the names of all who helped me in one way or the other, but I can say your help was not negligible. To everyone who gave me just a smile in my irksome school days, I delightfully express my sincere gratitude.

#### To

My loving and princely wife, Janet Bakabaka AKA "LADY B". My kids, Afo'o Trixy, Miyaka, Ekanek, and Zemec. You are my sunshine.

#### **ABSTRACT**

This qualitative study investigated inservice teachers' perceptions of facilitated video analysis of instruction (FAVAI) on teacher professional development. The study borrows from the efficiency video of instruction has provided preservice teachers in previous research. The study made use of a group of five inservice teachers who took a professional development course labeled the Bakabaka Video Pedagogy (BVP). These teachers participated in watching and analyzing videos of instruction. A midcourse anonymous online survey was administered four weeks into the course. At the end of the BVP course, a post-viewing interview was administered to all the participants. The key research questions guiding this study were:

- 1. How would facilitated video analysis of instruction by inservice teachers enrolled in the BVP course impact their professional development?
- 2. a) How might this professional development influence their learning community?
  - b) What might be the possible lasting outcomes of this experience?

The analysis and findings from the data collected from the five inservice teachers who registered for the course pointed to the fact that: (a) Scaffolding Experience: FAVAI scaffolded and enhanced the learning of the teachers in the study; (b) Classroom Management issues: FAVAI provided the inservice teachers a unique opportunity for

interaction and mutual learning; (c) Learning Through Reflection: Interactive reflections during FAVAI allowed the teachers to think deeply about knowledge and pedagogy; (d) Mutual Learning Among Participants: The teachers discussed and updated their understanding of classroom management issues; (e) The Power of Analysis: the power of analysis neutralized the mediocre teaching in some of the videos; (f) Consequential Impact of FAVAI: Analysis of data from the course study suggested that there could be useful consequences on the learners.

#### **CHAPTER I**

#### INTRODUCTION

As far back as the 1960s, experienced teachers' videos of instruction have been used to improve upon teaching and learning (Marx, Blumenfeld, Krajcik, & Soloway, 2002; Kurtz, & Batarelo, 2010; Canning-Wilson, 2000; Oliviero, 1965). Because these recorded videos of instruction have the distinctive potential to capture the richness and complexities of classroom practices, videos of instruction have increasingly become a critical lens for practice in teacher education (Brophy, 2004). Cultural traditions can be uncovered with the use of videos of instruction for appraisal and replacement if need be (Santagata et al., 2007). In addition, real teacher professional development is one that must provide numerous opportunities for teachers to observe and analyze classroom practices (Darling-Hammond & Sykes, 1999; Garet, Porter, Desimone, Birman, & Yoon, 2001; Santagata et al., 2007; Barlow, McCrory, & Blessing, 2013).

Videos of instruction were developed and utilized because of microteaching, which was a means by which trainee teachers were shown a simplified view of the art of teaching (Cooper & Allen, 1970). Microteaching is actually teaching at a micro level, which means teaching fewer students and covering fewer aspects than in an average mainstream lesson. "The lesson is scaled down to reduce some of the complexities of the teaching act, thus allowing the teacher to focus on selected aspects of teaching" (Cooper & Allen, 1970, p.1). The aim of microteaching is to simplify the teacher training with fewer aspects to teach so that the trainee teacher would be able to have a good grasp of

teaching or pedagogy. Video was introduced in teaching in the 1960s to reduce the tension on novice teachers before they ever get into actual teaching. Novice teachers entering the classroom for the first time to do actual teaching brings pressure on them because of their inexperience in teaching since microteaching was not showing the big picture of teaching and learning. Video of instruction was then created to give the novice teachers a preview of what classroom practices look like. According to Cooper & Allen, (1970) after watching experienced teachers' lessons for a while, the novice teachers would have acquired enough momentum to absorb the pressure.

The trainee teacher would be given a few students to teach and the lesson is videotaped. After the lesson, the trainee teacher is given the opportunity to analyze or critique his or her own lesson after watching it in the video. Then all other trainees would view and analyze it. After that session, a different trainee would be asked to restructure the lesson and do a re-teaching of the same lesson, possibly to different set of learners. This cycle continued until the trainees mastered or demonstrated a mastery of the required teaching skills. One of the principal reasons for which video was introduced in education was the idea that videos of instruction would subsequently be able to be a replacement for classroom observation (Brophy, 2003; Olivero, 1965).

Experientially, teachers have very little time to observe their colleagues or other teachers due to the work they have to accomplish at the end of the day. In my review of research articles, allowing teachers to view and analyze videos of instruction of their counterparts is very common in preservice teacher education. However, at the level of inservice teachers, this component of teacher professional development is not very well documented. Since all professional development leads to student learning, it is thought

that if teachers have the possibilities of improving their craft through analyzing videos of instruction of fellow teachers, their rejuvenation would impact student learning and improvement as well (Phelan, 2003).

Videos of instruction have been only lightly explored as tools for teacher growth, in spite of their potential in supporting inservice teaching professional development. One of the major weaknesses of earlier research on videos of instruction and inservice teacher professional development is that a vast majority of the articles and studies conducted depended on the teachers' report about the improvement of their professional development. Results have rarely been obtained from a classroom instructional viewpoint. Some of the few researchers with specialization, in particular, subjects such as mathematics, attempted to investigate the usefulness of videos of instruction to inservice practitioners. Literature has been found to corroborate the impact videos of instruction can have on teacher professional development and this includes van Es, (2012) and Borko, Jacobs, Eiteljorg, & Pittman, (2008). Some research on the impact of videos of instruction on inservice teacher professional development used artificial learning communities like the video clubs (DuFour, 2004; DuFour, & Eaker, 2010; DuFour, 2005).

On the use of videos in teaching and learning, Coles, (2011) and Moyer-Packenham, Kitsantas, Bolyard, Huie, & Irby (2009) explored the usefulness of videos of instruction for providing professional development. In the same light, this current study seeks to extend the academic literature to the role videos of instruction can play in the professional development of inservice teachers. It is an effort to broaden the scope of this

topic and to enable educational stakeholders to be aware of the value of videos of instruction to inservice teacher professional development.

Videos of instruction have been shown to be the most plausible tool for the professional development course because a video of instruction is the medium with the potential to provide teachers with the opportunity to observe an unlimited number of methods without having to travel or displace the teachers (Marsh, Mitchell, & Adamczyk, 2010). In addition, group observation is very possible when the teaching is on videos of instruction because too many observers in a single classroom would distract both the teacher and students (Marsh, Mitchell, & Adamczyk, 2010). The teachers' ability to notice how students reason when learning is important for lesson planning and remedial teaching. Analysis of expert teachers and their recorded videos of instruction can serve as a significant way by which these teachers understand the ways in which their students reason while learning (Blomberg, G., Stürmer, K., & Seidel, T. 2011).

In Kozma (1991), a debate for and against the significance of media in learning between the author and another researcher, named Clark helps to shed more light on the importance of media. It is important to note that Kozma seeks particular videos of instruction for specific purposes while Clark feels that videos of instruction make no significant difference. Clark compares the effect of media in student learning to that of food trucks in nutrition. This argument does not consider that some trucks can deliver food very late and others may deliver food in unhygienic conditions and this will have an effect on the nutrition of the children. Kozma contrasts this argument by suggesting that the media plays a significant rule in learning because the brain records and remembers certain concepts that were learned through the media, rather than learned otherwise

(Medina, 2011). From this research, videos of instruction are effective if properly utilized. Four significant steps need to be followed to have the desired impact of videos of instruction.

- (a) The selected videos of instruction must be authentic.
- (b) The videos of instruction must correspond to the grade levels of the teachers watching.
- (c) One must make sure teachers benefit from the videos of instruction selected for viewing.
- (d) The intent of the videos of instruction must be taken into account (Sherin Linsenmeir, van Es, 2009).

Some subjects and topics are generally challenging to the majority of learners because of their complexity in nature. "Video can take tacit information or knowledge that may be too difficult to describe in text into an articulate, vivid description through the use of images" (Hartsell, & Yuen, 2006, p.32). This injects life into lessons by allowing learners to apply their visual and auditory senses to learning. A medical student who understands the abstract concept of blood circulation, digestion, or brain damage for instance, will be easier understood with the help of multimedia enhanced visuals than without (Kozma, Chin, Russell, & Marx 2000). When students integrate multiple representations of information like animations, digitized clips of videos of instruction attaining a central conceptual understanding becomes easier because of the combined effects of sight, sound, and action which are captured by the emotional brain (Medina, 2008; Kozma, Chin, Russell, & Marx 2000).

Incisive contributors on the usefulness of videos of instruction in teaching and learning include van Es (2012) who found videos of instruction to be an indispensable tool for teacher professional development, especially because it is capable of uniting the teachers under the common goal of learning through sharing, with the possibilities and options of stopping, rewinding, and fast-forwarding when desired. The security which video of instruction offer preservice teachers helps in reducing the tension and fear of new preservice teachers who typically feel intimidated by their veteran peers in face-to-face situations. Results suggest that the videos of instruction rendered teachers more conscientious and involved in their profession rather than simply being passive (Rhine & Bryant (2007).

Prior to their research on the use of videos of instruction to enhance inservice teacher professional development, Baecher, Rorimer, and Smith (2012) found a teacher who lamented that, "In my department, teachers don't share lessons and resources that much. We don't really meet to talk about our teaching." However, after videos of instruction were used to help teachers gain confidence and feel safe among peers, one participant stated, "it was so supportive and applicable and driven by teachers working through questions together" (p. 58).

Blomberg, Stürmer, and Seidel (2011) believe videos of instruction can be helpful to reveal the learning attitude of students towards their teachers' attitudes, which could be used for improving teacher effectiveness. In order to show how functional videos of instruction could be in enhancing good teaching, some teachers were able to make use of contemporaneous examples of everyday, "unscripted" classroom activities to illustrate their teaching in a flexible and responsive way. The lessons were taped via video and

transmitted into a room where preservice teachers were able to experience the same example of classroom practice. At the same time, a group observation would not be possible without this particular use of technology (Marsh, Mitchell, & Adamczyk, 2010).

Teaching and learning is a complex practice, which involves several psychological components. Towers (2007) found that well-designed videos of instruction excerpts have the engaging force to draw viewers close to the complexities of teaching and learning in classrooms, while giving the students room to only pay attention to what is necessary rather than to every detail that occurs in the classroom, which could be distracting. The fact that it is not live can also help preservice teachers to concentrate on pedagogy rather than various distractive classroom activities. The videos of instruction aided preservice teachers to gain more knowledge of teaching practices merely by viewing video tapes of instruction from previous lessons (Towers, 2007).

#### **Statement of Problem**

Facilitated video analysis of instruction could be a panacea for inservice teacher professional development, but judging from the research done focusing on inservice teachers' use of this medium; I asserted the critical component which is facilitation is often left out. My study of video of instruction use in teacher professional development will employ an approach which has facilitation as pivot unlike most studies on video of instruction which do not include it. The component of facilitation adds the potential to enhance teacher enjoyment of professional development as well as builds a community for learning. A lot is said about student enjoyment of lessons and less said about teacher enjoyment of professional development whereas teacher renewal can translate into student success. My method of professional development for inservice teachers is not

currently used to improve inservice teacher skills and experience. It has been reported that during the professional development week, most inservice teachers are subjected to the top-down lecture method during which they typically passively listen and take notes. Apart from this, the only other option widely utilized and often required is classroom observations during which they schedule and observe their colleagues' lessons to learn from them. Unfortunately, the top-down lecture system does not include the inservice teacher as an active partner in the construction of his or her own knowledge. Inservice teachers have only few opportunities to do classroom observation as well as unvaried professional development strategies. With the busy schedule of inservice teachers, classroom observations have been very difficult to schedule because of teacher availability, and fears of teacher privacy violation. Even when they are scheduled, the visiting teacher gets so involved in the teaching that she/he generally does not have the time to observe and learn (Suters, 2004).

Videos of instruction have been used to enhance learning in preservice teachers, and there is an abundance of sources that point to its success as an interventional tool (Ingram, 2014; Koc, Peker, & Osmanoğlu, 2000; Lee, & Wu, 2006; Rhine, & Bryant, 2007; Blomberg, Stürmer, & Seidel, 2011). This abundance of sources is contrary to what exist for inservice teachers who have literature on videos of instruction and pedagogical professional development done without facilitation (Nielsen, 2015). My research is aimed at emphasizing the role of facilitation in the expansion and growth of the current literature in order to help expand inservice teachers' knowledge about the numerous advantages of facilitated video analysis of instruction to their professional development.

#### **Purpose of Study**

The purpose of this study is to investigate the BVP inservice teachers' perceptions on what I call Facilitated Video Analysis of Instruction (FAVAI) regarding their professional development. The usefulness of facilitated video analysis of instruction already experienced by preservice teachers might be applied to inservice teacher professional development with similar or even greater success, in order to ultimately give them their own independent critical stance—on its value, convenience and effectiveness. The participants in this study were all enrolled in a professional development course, which has been give the pseudonym of BVP throughout this study. The unique and specific characteristics of inservice teachers suggest that the enhancement of their professional development carries a particular importance that differs from that of preservice teachers (Darling-Hammond, & Bransford, 2007; Day, 1999). Given the importance of fostering the inservice teacher a lifelong learner, as well as the scarcity of literature regarding the use of videos of instruction to enhance their professional development, a further investigation of inservice teacher experiences and impressions regarding the use of facilitated video analysis of instruction is warranted (Darling-Hammond, & Bransford, 2007).

The question this study seeks to answer is, "What are the perceptions of inservice teachers about FAVAI in their professional development? Further, this study seeks to determine the role videos of instruction play in preservice teacher education can be beneficial in inservice teacher professional development as well. In addition, although students' learning outcomes are not the focus of this study, there is the hope that the improvement of teacher professional development can directly impact students' learning.

Finally, this study seeks to reveal, from the BVP participants, the possible impact of this FAVAI experience on their students' learning and achievement. In order to achieve the purpose of this study, succinct, unstructured, and open-ended research interviews and survey questions were asked of the participants, who were all current seasoned teachers.

#### **Research Questions**

The key research questions guiding this study were:

- 1. How would facilitated video analysis of instruction by inservice teachers enrolled in the BVP course impact their professional development?
- 2. a) How might this professional development influence their learning community?
- b) What might be the possible lasting outcomes of this experience?

To investigate these research questions, Consensual Qualitative Research (CQR; Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess, Knox, Williams, & Ladany, 2005) was used to analyze the experiences of five teachers—four females and one male teaching at the various levels from elementary to high school. A further description of the methodology and results of the findings are discussed in Chapters Three and Four.

#### **Significance of Study**

Inservice teachers' lack of effective professional development opportunities and experiences to help improve teacher-student relationship is one of the reasons students' dropout rates have remained relatively high in schools (Darling-Hammond, 1990; Billingsley,1993; Wayman, 2002). Some professional development sessions are used to lecture the teachers from top-down rather than help them construct their own knowledge. School principals depend largely on classroom observations, which have many shortfalls. For instance, the busy nature of the classroom has the tendency to pull the observer into

helping organize thereby missing opportunities to do proper observation (Wragg, 2013). These notwithstanding, the success of any nation depends on the effectiveness of the educational system, which rests in the hands of the teachers (Rumberger & Thomas, 2000). The use of videos of instruction for inservice teachers' professional development is not extensively explored and addressed in scholarly research, thus there is a scarceness of literature on inservice teacher professional development. This neglect could be based on the assumption that the teachers' field experiences are enough to sufficiently equip them for their teaching profession. This assumption could be challenged by the abundance of literature on the video of instruction conducted at the level of preservice teachers (Arya, Christ, & Chiu, 2014; Brophy, 2004; Blomberg, Stürmer, & Seidel, 2011; Fong, & Woodruff, 2003; Marsh, Mitchell, & Adamczyk, 2010; Osmanoğlu, Koç, & Işiksal, 2013) in spite of the lacking literature focusing on their inservice counterparts.

Due to narrowed research on video of instruction and teacher professional development at the level of inservice teachers, which lacks the component of facilitation also, this project seeks to determine the role facilitated video analysis of instruction can play in professional development of inservice teachers. If this study produces successful results, regarding the use of videos of instruction for inservice teacher professional development, then the school and student may experience improvement in learning outcomes.

#### **Unique Contributions**

Initially, this research was inspired by my interest and experience in the use of video of instructional with both students and teachers. Having observed and studied videos of instruction, video at various levels, I felt that my unique contribution stems

from two areas: (a) my professional background, and (b) my educational background. As a Sub-Saharan African, I have strong feelings about the role of education in my community. With my background in teacher education, and since discovering that video is a very attractive option and, that the business sector was making the most use of it to promote their businesses via advertisements; I have been tirelessly seeking the means by which video could be adapted to enhance inservice teacher professional development. The dilemma of modern day inservice teachers is that they live in abundance of technology and yet do not have enough pedagogical support in this area. Teaching can be difficult and challenging work, while learning to teach is often a daunting process in which teachers often find themselves on their own with little support or encouragement (Corriero, & Romeo, 2011). Facilitated video analysis of instruction may have the potential to help boost inservice teacher professional development. Additionally, the factors that render my contributions unique in this field are the realities uncovered as regards classroom observation, and the power of analysis. Used in a theoretical framework of community, social constructivism, and scaffolding, I believe that facilitated video analysis of instruction has the potential to improve inservice teachers practice in both the short and long term.

#### **Implications**

This study might help teachers to become more conscious of their practice when they get feedback from analysts. The teacher with limited possibilities could possibly improve on their practice with the help of this study, which can serve as an additional source for teacher reflection and development of skills. Finally, when teachers improve their instruction that may directly affect students' learning outcomes given that

transformed teachers can help develop students into becoming more attentive and successful learners.

#### **Definition of Terms**

*BVP*: This is an acronym I have coined to serve as a pseudonym for the professional development course I taught and collected the data for this study. It constitutes viewing excerpts of videos of instruction and analyzing them with the help of a facilitator moderating the process.

*Video of instruction:* A video of instruction is video of a teacher or teachers instructing a lesson to students in a classroom setting (Friel, & Carboni, 2000).

FAVAI: Stands for "Facilitated Video Analysis of Instruction" relating to inservice teacher professional development. This is the act of watching and analyzing videos of instruction together with a focus group of inservice teachers along with a facilitator moderating with prompts like, "What is an example of good teaching in this video?"

Scaffolding: Vygotsky (1978) coined this word when he was referring to the supportive techniques children or learners get from experienced people or teachers to help them construct knowledge and understandings to the point where they become able to independently construct their own knowledge. In this study, scaffolding refers to the support which participants gave each other to become more professional, efficient, and productive with the help of the facilitator.

#### Scope

The scope of this study involved inservice teachers with over two years of experience teaching at any level from elementary to high school within a local school

district in the Midwest. The study focused on BVP inservice teachers' judgments of the usefulness of facilitated video analysis of instruction to their professional development after viewing videos of some expert teachers. Since this academic project was limited to inservice teachers, the impact of this exercise on learners' outcome was inferred from the teachers' perceptions of facilitated video analysis of instruction only.

#### Limitations

The participant number for this study was not as large as targeted before the study started. In spite of the fact that data collection reached its saturation level coming from two rounds of interviews, a survey, two written documents, and six focus group interviews, there were five participants for this study. A larger number of participants would have yielded more data.

#### **Background**

This research took place in one school district of the Midwest. This district school ranges from (early) head start to high school. The school district has five head start programs, 12 elementary schools, four middle schools, and three high schools. The school district has a student enrollment of 7,255 students as of April 2016. The teacher respondents suggested that their teaching profession, which is supposed to render teachers as lifelong learners, has yet to contribute to get them to the state of perpetual learning. Concurring with this assertion is Senge, Cambron-McCabe, Lucas, Smith, Dutton, & Kleiner, (2000). The shortfall of inservice teacher professional development is further compounded by the lack a structure for teacher renewal as well as insufficient time to do individual reflections or observe the practice of other colleagues (U.S. Department of Education, 2000). Common themes emerged in this study after patterns in

respondents' narratives were isolated. This allowed for the possibility of exploring the ideas of the participants in such a way that ideas not predetermined by me were able to emerge.

#### **Chapter Summary**

This study is segmented into five chapters. *Chapter One* introduces the topic of teachers' professional development after the analysis of video, while incorporating the purpose of the investigation, the statement of the research problem, and the potential significance of this study. In an effort to further explore the connections between facilitated video analysis of instruction and teacher professional development, the literature regarding video of instruction, teacher professional development, and the impact of this experience on the learner is reviewed in *Chapter Two*. *Chapter Three* constitutes a thorough explanation of the research methodology for this inquiry. *Chapter Four is the* presentation of the results of this study. The themes that emerged from the participant interviews are underscored along with a discussion of interview data comprising each theme. Finally, *Chapter Five* provides a summary and discussion of the research findings, including the recommendations, limitations, implications, further studies recommended, and conclusions of this study.

#### **CHAPTER II**

#### LITERATURE REVIEW

In this chapter, relevant literature relating to the proposed research study was reviewed. In other words, the perceptions inservice teachers have about facilitated video analysis of instruction on their professional development were reviewed. I was curious to see how the existent literature would align or not align with my data and findings. Due to the uncommonness of this topic, and the limited amount of related sources and articles, this review is a synthesis of research on the impact of analyzing video of instruction on teacher professional development. Areas of research that related with my field of study were examined to provide a background while presenting the range of research that related specifically to the proposed study. Van Es, Tunney, Goldsmith, & Seago, (2014) assumption that simply viewing video without analysis does not enable teacher learning, will guide this section.

Video of instruction is the video taken of a teacher actively exercising his or her teaching profession (Beaudin, & Quick, 1996; McCurry, 2000). For example, a video of a teacher helping students to learn the concept of metamorphosis, grammar, fractions, to name but these, are videos of instruction. Recently with the advent of massive open online classes (MOOCS), the Flipped classroom, and e-learning phenomena, research and use of video of instruction has increased (Towers, 2007; Obradovich, Canuel, & Duffy, 2015). Teachers provide students with recorded videos of their lessons taught so that

students can watch them on their own ahead of the class discussions and assignments. I will use this term "videos of instruction" in the same sense as Friel, & Carboni, (2000).

Teacher professional development may denote a multiplicity of professional training, which aims to improve teacher awareness, expertise, or efficiency in exercising their teaching duties (Darling-Hammond & John Bransford, 2006). Inservice teacher professional development is necessary because it is a unique opportunity to embed new research discoveries in the experienced teacher, (Desimone, Porter, Garet, Yoon, & Birman, 2002).

#### **Procedure for Literature Search**

Initially, the search began in the Academic Search Premier, and then progressed to Elton B. Stephens Co (EBSCO), the Educational Resources Information Center, (ERIC), ELSEVIER, and SCIENCE DIRECT. My exclusionary criteria were based on relevance of articles to the topic. Articles that did not directly address video of instruction, inservice teachers, and teacher professional development were excluded from the literature. When my searches did not give the required results, I expanded to Google scholar and Dissertation Abstracts. Again, this topic is not given much attention so only a couple of articles came out of my searches. I began by using the key terms a) video of instruction; this gave 41,932 articles but only three of them were relevant to my topic. b) Professional development video, gave 96,680; out of these, only eight were relevant to my topic. c) Inservice teacher video. This gave 380,000; but only five were relevant to my study. d) Teacher collaboration video-18,689; this key term was very good as it produced over a dozen articles. e) Video analysis of instruction produced 18,036; but only two were useful to me. f) Teacher video analysis-41,790. This key term was also

good for it yielded another half a dozen articles. All the searches were conducted at the Chester Fritz Library of the University of North Dakota with the assistance of a specialized librarian. Of all these articles, very few related directly to my topic while most of them handled video of instruction at the level of preservice teachers while a good number of them were completely out of topic either talking of video games, or video for students with impairments of one type or another. This shows how inservice teacher professional development struggles on its own and why my topic is necessary to close the gap.

#### Introduction

The well-equipped teacher is a great asset to students and the social well-being of the community. Given the frequency with which both inservice teachers and students dropout out of school, and the relationship between teacher quality and student success rate, (Koedel, 2008; Suhyun, Malchow, & Jingyo, 2014; Archer, 1999), it is worthwhile considering reinforcing inservice teacher competence. Emphasis on inservice teacher professional development is of critical importance to the school, community, and educational stakeholders. There is a need to vary professional development experiences in such a way that the inservice teacher is given platforms on which to actively participate in the construction of his or her own knowledge. This will equip him/her to better meet up with the needs of students, especially those of diversity (Banks, Cochran-Smith, Moll, Richert, Zeichner, LePage, & McDonald, 2005). With the challenges faced in scheduling and doing classroom observations, integrating video technology in the professional development of inservice teachers would be a step in the right direction. Already, much has been done for the training of preservice teachers (Zhang, Lundeberg,

Koehler, & Eberhardt, 2011; Berk, 2009). One of the strategies used is the video analysis of instruction which gives the preservice teachers the possibilities of viewing and analyzing different instruction of other teachers. This forum has proven to be efficient to build the teachers' reflective skills, help them to learn from one another in a community of learning, and generated scaffolding activities (Borko, Jacobs, Eiteljorg, & Pittman, 2008).

Inservice teacher professional development is extremely important because teachers with access to more resources are more likely to motivate their students in positive ways and thus yield better results in the classroom (Pekrun, Elliot, & Maier, 2009). Implementing analysis of video of instruction has been shown to be of help to inservice teachers' professional development (Sherin, & van Es, 2009; Sherin, Linsenmeier, & van Es, 2006, April). Because learning cannot be effectively carried out in isolation, the component of socialization and collaboration is pivotal to the success of teacher professional development (Seidel, Pehmer, & Kiemer, 2014). Videos of instruction have been used to provide the context for this professional development with great success. Videos of instruction have the propensity to capture even obscure aspects of the classroom which would normally be ignored by real time classroom observers (Borko, Jacobs, Eiteljorg, & Pittman 2008; Borko, Koellner, & Jacobs, 2010).

Videos of instruction enhance learning environments and potentially allow teachers to feel comfortable and in meeting and in freely sharing their knowledge and opinions on the subject being analyzed. These interactions create room for teachers to bond and become more collegial; resulting in fruitful relationships. These relationships, in turn, further facilitate collaboration during reflection, lesson planning and realization

of teaching routines, all to the benefit of the students (Hiebert, Gallimore, & Stigler, 2002; Seidel, Pehmer, & Kiemer, 2014). Video analysis of instruction has and should be attributed a special place in teacher professional development because through video analysis of recorded lessons, cultural differences and routines can be brought to the limelight for either acceptance or change (Santagata, Zannoni, & Stigler, 2007). That notwithstanding, video of instruction could be a source of misleading inefficient teaching for two main reasons. When the video of instruction is of poor quality viewing, as a result, teachers might not benefit significantly. Another example of misuse of video of instruction may be that some teachers could use videos of instruction as a substitute of teaching by being absent from class in order to ask their students to watch and learn from a virtual teacher. Also, even when some teachers are present in class, rather than teach, they would want to let the students learn directly from videos. These examples of potential misuse of video of instruction may render it a risk rather than a solution. Another weakness videos of instruction may be the possibility that students can hardly be as engaged in learning via video alone in the same way they would likely be with active, in person teaching.

#### **Video of Instruction Supporting Noticing and Remediating Learning**

Pinpointing the specific challenges students face when attempting to learn new concepts is pivotal and will allow for remediation, which is likely to bring about academic success. When scrutinized, videos of instruction have been used to capture specific moments where students struggle to untangle a problem, such as in mathematics. By identifying these challenges, teachers are more able to provide support where the students may be struggling. Sherin & Van Es (2009) conducted one such investigation by

scrutinizing the development of "teachers' professional vision" (p. 20). Their context was what they called Video Club Participation. The video club had teachers meet monthly to watch and discuss video excerpts from each other's classroom. Using their professional vision, which mean the teachers' ability to identify how students learn and what challenges they face. They created two video clubs, the Nile and Mapleton video clubs for this purpose. To generate data, the investigators had mathematics teachers meeting every month to watch and discuss excerpts of each other's classroom interactions and activities for a two-year period in two video clubs. Teachers, particularly of mathematics, were meeting every month to watch and discuss excerpts of each other's classroom interactions and activities. The aim of these meetings was to analyze videos of instruction through the exchange of teaching and learning ideas. Both video clubs were similar in their objectives, to help teachers identify and analyze the issues students raised about mathematics (Sherin, 2000; Sherin, 2001; Sherin, 2004, Sherin, 2008; Seago, 2003).

Four middle school mathematics teachers participated in the Nile video club, which held seven meetings per year, each lasting 40 minutes each. The participants' teaching experience ranged between 1-28 years and they were all paid volunteers. The Nile school is located in a wealthy area on the west coast in a large city with over 70% of the students identified as white. The Mapleton video club constituted seven elementary school teachers who taught grades four and five. The teachers met once or twice a month for an hour a day and recorded 10 meetings during the school year. Their teaching experience was between one and nine years. They were all selected by the school principle, unlike the Nile teachers, and they received a stipend like the others. Mapleton School is located in an urban area in a big Midwestern city with a large African American

student population of about 60%. These participants also consented to do a pre- and post-interview on identifying students' difficulties or challenges. In each interview, the teacher viewed short video clips of about three minutes consisting students showing signs of thinking on math problems.

The video club participation study utilized differing methods in order to convey information. The combination of these methods stood a good chance of appealing to both the quantitative and the qualitative researchers. It was found that participating in the video club influenced the teachers' professional vision as exhibited in the video club meetings, in interviews outside of the video club meetings, and in the teachers' instructional practices. The overall results were positive. Teachers' attitudes towards the problems and difficulties of students changed drastically. They developed what is known as knowledge-based reasoning (Sherin, & van Es, 2009), which means that the teachers started reasoning differently when it came to students' problems. Teachers started accepting students' perspectives and developed a sense of sharing by allowing the students to share their own perspectives of learning. Teachers also learned from their peers through the video clubs. In addition, this study illustrates that the video club has the potential to support teacher learning in ways that were beyond the boundaries of the video club meetings.

Unlike Santagata, Gallimore, & Stigler, (2005) and Brophy, (2003), who did not use video clubs in their research, the video clubs study has a special twist in that it adds a new idea to the use of video in the research on teaching and learning. The idea of the video club was well received and respected by scholars. The research engaged in a mixed method, which expands the study in a way that a single design does not. This is a

beneficial strength because it gets rich data from various perspectives. The study summarized its findings in tables and statistic, which sheds more light on its findings. Learning as well as teaching can be quite challenging but with results from a study like this one, it becomes easier to solve classroom challenges. Educators need to continually search and work out means to improve learning and teaching. This research has the potential to widen teachers' horizons to a new dimension —that of better understanding their students' reasoning.

The idea of creating two video clubs for data collection was good. The decision to focus only on the data of the first and last meetings of all the 10 meetings in the Mapleton Video Club and the seven meetings of the Nile Video Club make use of only some of the data collected. The study findings were consistent with Blomberg, Stürmer, & Seidel, (2011) by aligning to say videos of instruction helped teacher participants to better understand their students' challenges and perspectives in order to be more prepared to help them surmount learning difficulties. Successful teachers have to understand students' challenges to be able to assist them effectively. Essentially, all teaching efforts aim to achieve students learning.

In this study, Blomberg, Stürmer, & Seidel (2011), systematically investigated professional vision as elicited by videos of various subjects. Professional vision is the ability to observe what is happening in the classroom and to make sense out of it from a professional perspective. A group of teachers was brought together to investigate how much attention they pay on the learning habits of their students and to see how these teachers could be motivated to identify significant components of teaching and learning with the potential to influence students' learning. Six video clips were presented to the

group of teachers. After watching, they were asked to rate according to pedagogic standards. After this, they were asked to watch the video a second time. Questions posed and answered indicated that the teachers evolved in their ability to understand students' reasoning in learning. This brought about the conclusion that utilizing video material recorded of their classes or others can be suitable in eliciting in inservice teachers the ability to observe learning in the classroom. This research may have a deep and telling impact on the training of educators of this millennium. Striving to train teachers to notice and understand students learning is not commonplace. However, the video of instruction context made it possible and as a result, serve as the basis for conducting this research.

The application of mixed methods in the data collection and analysis brought a balance of assessment to the research findings. Conclusively, if teachers take time to find out how their students learn and to understand why they confront certain difficulties, at particular points, then, teaching and learning could be simplified, teachers and students may be increasingly motivated, and learning would be more enjoyable. Students and teachers would experience more joy in teaching and learning with fewer challenges. For centuries, teaching and learning has been focused on the teachers and teaching methods (Huba, & Freed, 2000). The teacher dictated the activities in the classroom. Perhaps, the time has come for learners to take central stage in the teaching and learning environment. Students need to be re-defined as the teacher is a co-learning partner when videos of instruction are utilized. The main weakness of Blomberg, Stürmer, & Seidel (2011), is that they did not touch on classroom observation as compared to video analysis of instruction, which is a pivotal reason to urge school administrators to use FAVAI for teacher professional development.

### **Video of Instruction Supporting Teacher Reflection**

Teacher reflection is a cardinal component of the teaching profession because of its potential to inform and transform inservice teachers professional development.

Teacher professional developers handle reflection seriously at the preservice level but when the teachers graduate and become inservice teachers, reflection is no longer seriously considered. Enhancing this skill in the inservice teachers is equally important because the students can significantly benefit from it (Larrivee, 2000). One of the ways this can be achieved is via video analysis of instruction. When teachers engage in reflections, they are likely to better generate knowledge, make use of their experiences and connect their knowledge to inform future decisions about instruction (Fendler, 2003). Van Es & Sherin (2008) situated their study on the claim that "reflection is the key to improving one's teaching" (p.246). They wanted to exchange ideas to understand changes in teachers' thinking within the classroom-teaching context, which is particularly important for teacher professional development.

The paid participants, involved in the video club study were seven 4th and 5th grade elementary teachers with teaching experience ranging from one to over 20 years. The club met 10 times within the 2001-2002 academic year and watched videos of their colleagues, which they brought to the club. The videos captured all the interactions in the classroom including students' responses and collaborative group work. After the data was analyzed, results suggested that teachers' attitude of instruction changed significantly. They started thinking about classroom interactions in new ways. They learned about one another's teaching as well as how students understand mathematics. "...The teachers commented that viewing the video helped them to realize the importance of having the

opportunity to explain their ideas in class" (Van Es & Sherin, 2008, p. 265). Teachers attested to the fact that their participation in the video club helped them to understand the importance of attending to students' thinking and to re-examine teachers' pedagogy. They consequently slowed down their instruction and asked more questions of their students during teaching, suggesting that they had become more student centered than they were before the exercise.

In as much as this strongly suggests that video analysis of instruction by inservice teachers is beneficial to the students and teachers, the results of this study are likely to be discredited to the fact that the teacher participants analyzed videos of fellow members of the video club. It is thought that the challenge to critique someone in their face could interfere with the exercise, rendering results unreliable. Comparing the perception of the teachers before the video analysis and after the exercise, the researchers discovered that the teachers learned to notice and shed light on students' mathematical thinking in the classroom context.

Apart from just examining students' thinking patterns during learning, reflection has proven to be pivotal in teaching and learning in such a way that it can become the pillar of inservice pedagogic training programs. One of the reasons it could be so predominant in teacher professional development is that it can offer new perspectives and inspire good decisions (Hamilton, 2012; Schön, 1991). In her research, Hamilton did an auto-ethnography in which she placed a video camera at a particular spot at the back of her classroom and recorded a video of herself teaching. She analyzed the video data by herself to see how her teaching goes. She found that she was able to reflect on her lesson in a way she had never done before. She concluded that video analysis of her instruction

was beneficial because it gave her a new perception of her course content, management of the classroom, and teaching method.

It is worth noting that reflection in education has its own excesses. Reflecting to most educational practitioners denotes listening to the trusted inner voice alone while avoiding anything from the untrusted outside voices (Fendler, 2003). In addition, journals, which are often used as a medium for reflection, become a means of exposing one's privacy especially when authorities use them to get information about people (Beauchamp, 2015). This renders reflection problematic because learning is socially constructed and we cannot socially construct knowledge without outside opinions and contributions. Teacher reflection has the potential to alleviate stagnation in the profession. That notwithstanding, a word or two on the controversies surrounding teacher reflection will provide a balance to this research.

While teacher reflection is largely seen by many as the panacea for teacher development as an independent thinker and problem solver, another critical school of thought sees teacher reflection as a product of neo-liberal and neo-conservative crusaders with intent to stealthily gain control of teachers so as to render public education a factory for the production of workers for the global economy. Reflection in teacher education as it is, has not done much to help enhance teachers' professional development. This is because reflection has been reduced to trying to replicate teaching methods researchers purport could improve tests scores rather than independently developing alternative method for learning. Thus, reflection becomes the measuring of how well the teacher fits in the shoes of the teaching method of the researcher in question. Many claim that reflection is to be completed in a university only since the universities are theoretical

grounds while practice is meant to take place in schools. Thinking in this manner ignores the notion that theories are produced via practice and practice reflects certain theoretical stances. This school of thought leaves the impression that reflection is a means to an end, limiting the teacher to classroom practice and nothing else beyond that scope.

In addition, the teacher is meant to comply with what has been set as standards by others with reflection being limited to the classroom time frame alone with little or no consideration regarding potential ethical and moral underpinnings of education beyond the classroom time or school vicinity. Again, limiting teacher reflection to an inward look at self is not helpful to teacher development because individual self-bias makes it very difficult for the teacher to think of challenging structured educational policies not aligning with their individual methods or personalities. Teacher learning, in the context of self-reflection is limited because collaboration does not take place.

Video analysis of instruction can offer the BVP inservice teacher the opportunities of learning and constructing new teaching philosophies rather than staying on the judgmental bench of self-condemnation. Baecher, Rorimer, & Smith, (2012), brought together inservice teachers with the aim of letting them watch and analyze videos from their own classrooms in order to shift them from being judgmental of their teaching to serious constructivism.

While more studies have been done on video analysis of instruction as a tool for teacher professional development among preservice teachers, only a relatively few researchers have examined how video-mediated inquiry works among inservice teachers (Baecher, Rorimer, & Smith, 2012; van Es & Sherin, 2010). Video of instruction serve as a medium for reciprocal understanding which allows the teachers to watch the same

lesson together and upon completion of viewing they emerge with completely different perceptions of the lesson with the possibility of sharing and learning from these perceptions.

In the study done by Baecher, Rorimer, & Smith (2012), seven voluntary teacher participants agreed to spend one academic semester working two hours a day for a total of eight sessions analyzing videos of instruction. They agreed to each bring excerpts of videos of instruction from their own teaching for analysis. They chose the video of instruction they considered would elicit more discussions and from which they were going to learn more. The videos of instruction were analyzed in the mini group. At first, teacher participants were more concerned about judging the accuracy of the lesson, but as time went on, they were advised to shift from being judgmental to actually learning from the discussions of the group. The data collected from these discussions were coded and categorized in accordance with grounded theory (Strauss & Corbin, 1990) and analyzed following peer debriefing. The findings supported the use of videos of instruction for inservice teacher professional development and included the following:

-The teachers shifted from being judgmental and defensive to a more academically rich learning conversation about their instruction.

- -They developed trust and a more collegial attitude towards each other.
- -They gained a deeper understanding of their teaching and practices as they relate to student performance in classroom.

For both inservice teachers and students, videos can be utilized as a special catalyst for discussions; it motivates self-awareness and identity transformation (Silvers, 2008). Unlike Van Es & Sherine (2008); Baecher, Rorimer, & Smith (2012) and other

studies on the importance of video to inservice teachers. By involving students in the discussions, Silver (2008) adds a new component to the literature for this bridged a gap that existed when students' voices were not heard given that the entire teaching profession has students at the very center.

In this study, the researchers, the class teacher, and a University professor introduced video of instruction to a class of 27 students, all fourth graders studying readings focused on social issues. Video clips of students and teachers discussing the issues raised in the readings were discussed, guided by the two principal investigators. The participants were given time to write down critiques, reflections and concerns about the discussions on the videos. These data were analyzed to reveal that:

Video provided a powerful catalysis for reflection and moving forward with all thinking regarding the students, teacher, and the researcher. It informed researchers on teaching and learning, and by reviewing the students' interactions with each other and the teacher multiple times in order to see what might have been missed during the actual engagements. The video also allowed an examination of the interpersonal dynamics from differing perspectives, inspiring researchers and the PI's to rethink what might have happened with different responses, choices and decisions concerning instructional content or design.

This was an interesting study that went a long way to include students who are the reason for all the teaching and teacher professional development (Motschnig-Pitrik, & Holzinger, 2002).

In as much as this could have been a good study, the two principal investigators who were not proportional to the students would be too small a sample to validate the

usefulness of video for inservice teacher instruction. This article thus, leaves a wide gap to be closed by subsequent studies. Succeeding to create a safe environment where teachers can feel safe enough to share their teaching on video of instruction clips is an essential step towards improving instruction in a collaborative learning context (van Es, 2012).

In their study, McFadden, Ellis, Anwar, & Roehrig, (2014) put together inexperienced inservice teachers who registered for a professional development course. In this course, they were allowed to choose and investigate any part of their teaching they liked to investigate. The model of instruction domain used was known as Danielson's. The Danielson's model instructional domain emphasizes clear and accurate communication, using questioning and discussions techniques, engaging students in learning, and providing feedback to students (Danielson, 2011).

Findings from the above study suggest that teachers gained in learning how to reflect on their practice. The teachers as well as all video annotations they created about their own instruction produced data sources. This includes the creation of an instructional plan to improve their instruction. They then recorded about 30 minutes of their plan to improve their instruction as documentation of their main objectives. They were then given computers with the software capability to mark annotations on the videos. They marked sections, which they would love to discuss about and gain deeper knowledge and insight. After the data were analyzed, the beginning teachers were categorized into three groups; those that started to develop reflective practice, but were not experienced; those that engaged in developing reflective practice; and those who had fully developed their reflective practice. These results suggest that discussion exercise granted the participants

the opportunity to recognize the importance of reflection and to incorporate this reflective dimension into teaching (Johns, 2004; Johns, 2009).

## **Video of Instruction Supporting Collegiality**

According to Social Constructivism theory of learning, knowledge is socially constructed within a social learning community. Unfortunately, from the report of my participants, time constrain on teachers is the main reason why they frequently work in isolation as opposed to working in professional communities. Given the challenging nature of teaching and the difficulties isolated teaching brings into instruction, video of instruction was used as the tool to generate shared discourse into collective interactions. The use of facilitated video analysis of instruction for the purpose of this study is important as video of instruction has the potential to compel teachers to identify the important aspects of the classroom integration, interpret the meaning of those interactions and decide on the next step to take towards remediation (van Es & Sherin, 2008).

This study lasted for one academic year, with the teachers meeting once or twice monthly. A total of 10 meetings took place. The participants were seven 4<sup>th</sup> and 5<sup>th</sup> grade elementary teachers with teaching experience ranging from one to 19 years. The participants were paid for their participation in the study and were also offered the opportunity to earn credits for professional development, as required by the school district. For the one-year period, the participants shared, watched, and analyzed 19 video clips from colleagues' classrooms. As they discussed, they were video recorded and digitized after each meeting. Qualitative methods of data analysis were used to find out if the group developed into a learning community with the help of the video. The

with each other, but when they became more comfortable they began to narrow their focus on the particulars of teaching and learning that were viewed in the video clips. These teachers who came from 4<sup>th</sup> and 5<sup>th</sup> grade levels became very collaborative in sharing knowledge with the help of video analysis of instruction, making the claim that FAVAI for inservice teachers has the additional benefit of unifying teachers under the common ground of learning. (van Es, 2012).

In this separate study of Pearson, Chambers, & Hall (2003) they sought to establish how video material could be used as a catalyst for teacher professional development between teacher assistants and inservice teachers. This research was conducted in two different schools alternately. One of the schools was equipped for special language teaching while the other was adapted for pupils with physical difficulties and challenges. Data were collected through classroom observations, semi-structured interviews, and questionnaires for both the pupils and the teachers. The lessons were videotaped with two cameras concomitantly, with one video camera focused on the teacher and another focused on the teacher assistant to monitor the nature of the relationship between the two. The staff watched and analyzed the videos and these analyses were recorded again for further analysis. The videos were then given to all other teachers to watch and make comments, but those who taught in the videos were advised to watch them before everyone else in effort to help them psychologically prepare to welcome criticism of their teaching methods and those of colleagues. The school considered these exercise as an inservice training for all of their teachers, and not merely for those peers who were featured in the videos.

Findings suggested that new insights into teaching were gained. Both the teachers and the teacher assistants reported that they had learned from the video exercise improved ways of working together for the good of the learners. The inservice teachers as well as the teacher assistants agreed that the analysis of video of instruction gave them an additional stimulus to reflect on their instruction, (Pearson, Chambers, & Hall 2003).

Another study was conducted by Gates, Barton, & Lavelle (2011) in Kent school District where the video study group method was adopted to help teachers apply research-based strategies to assist struggling math students improve their performances. At the time of the research, only 47% of the school district's 10<sup>th</sup> graders met state math standards. With the various educational stakeholders encouraging teachers to attend the video club, the first step in the research was to form video study groups (VSGs). The VSGs constituted separate groups for teachers and students who were allowed the freedom of interactions in their separate groups to help each other through discussions of various activities featured in the video. The participants involved seven fourth and fifth grade elementary teachers from this urban school spent time studying each other's methods and the way in which students appreciated Math. Central to the researcher's beliefs was that reflection is cardinal to improving teaching. Additionally, through peer teaching, the students and teachers learned from each other.

From late September through March, the teachers met twice a month during school time while substitutes covered their classes. Before each meeting, the class periods of two or three group members were videotaped by the students, not the teachers, and focusing on students' work and their interactions, questions and responses to instruction. The video was given to the teacher who chose a short clip to share at the next meeting

and use as a springboard for discussions about improving instructional practice. During the course of the training, video was captured at least twice in each teacher's classroom (Gates, Barton, & Lavelle, 2011, p. 55).

Much time was spent reading materials based upon the principles of VSG.

Lessons incorporated materials that stressed collaborative engagement in reflections, promoted inquiry, and emphasized critical colleagueship. Unlike other researchers, Gates, Barton and Lavelle (2011) made use of group work for the teachers first and then for the students. This encouraged collaborative teaching which had previously been lacking in the school. Some teachers were reluctant to be corrected or heed to advice; however, after participating in the video of instruction experience, video of instruction experience, the teachers became more collegial, suggesting that the investigation yielded positive results.

Teachers allowed their classes to be videotaped for the purpose of discussion. To avoid disorder, the teachers agreed upon group norms. For example, the teacher whose class was to be discussed gave a brief, but complete background to the class before discussions started. He or she also explained why a particular clip was taken and not another. At the start of the discussions, the group viewed the clip and then discussions started. Such a venture is not easily accepted especially when it is new. This explains why some of the teachers initially felt reluctant to join; and even commented that video was painful to watch, but when they saw what shots their students took of the classroom activities, they became willing.

From the Gates, Barton, and Lavelle's (2011) study, for both students and teachers, the results showed great gains in the students' learning outcomes. After the teachers had the opportunity to study their students' mathematical learning habits by

watching the video, they better understood how to facilitate learning for their math students. This enabled them to significantly improve in their teaching. Student learning improved also. The struggling Math students improved to a level ranging from average to excellent. Teacher misconceptions about students changed and discussions amongst students were thereafter encouraged. The improvement of relationships between teachers also improved according to 90% of the teachers. Like their students, the teachers learned much and gained new insights participating in the video study groups.

### **Video of Instruction Supporting Teacher Confidence**

Teacher confidence is an important part of the teaching profession because teaching is an active intellectual procedure which involves emotions. Learning from Bandura (1997), teacher confidence has proven to be a factor for the academic success of the learners. To be able to share knowledge on good teaching principles and to have a good learning experience, teacher confidence has a great role to play. In a cross-sectional study, Dobie, and Anderson (2015) sought to find out how teachers expressed contrasting ideas in video clubs, the way in which teachers communicate their ideas in a video club; and the factors that influenced their change in expression. The idea was that the level of confidence became critically important when teachers had to say something contrary to what others said.

Data were collected from three-hour long video club discussions, totaling nine hours of video discussions. The study used what they called conversation analysis (CA) to analyze the conversations arising from video-recorded discussions that occurred during those nine hours of interactions. The models of Sherin & Han (2004) and van Es & Sherin (2008) in which teachers gathered in small groups in video clubs to watch and

analyze videos of instruction were used. Participants in these studies were teachers who participated in one of the three video club discussions. The Westview, Lakeside, and Jackson video clubs had five, six and six participants who were secondary, secondary, and elementary teachers respectively. Data were digitized and transcribed for analysis. Findings suggested that teachers had three forms of expressing contrasting ideas or opinions namely open discussion, implicit critique, and serial turns. Also in the course of the conversation, teacher learning was achieved, as there were indications that teachers who demonstrated the same form of expressing contrasting ideas reflected collectively on issues (Dobie, & Anderson, 2015).

In spite of the laborious stages that this study went through, the nine hours spent in three different video clubs was not sufficient to bring about an acceptable conclusion. Data from at least a month's work would have been more credible to affect the study's trustworthiness. Nonetheless, the study borrows from earlier studies like Sherin & Han, (2004) and van Es & Sherin, (2008) suggesting the exercise of analyzing video of instruction by inservice teachers did have significant credibility.

A new study unlike those we have already seen above unlike those we have seen above was carried out specifically online. The interactions were not face-to-face, making it easier for the teacher participants to be able to critique their colleagues' lessons without any emotional influence. Marsh, Mitchell, & Adamczyk, (2010) conducted this two-year study 2005-2008, for the purpose finding out if interactive video technologies could be used to enhance initial teacher education programs for science trainee teachers. Experientially, experienced teachers, if observed in a real class time, intimidate trainee teachers. This project, code named In-School Teacher Education Project (IN-STEP), was

a collaborative study carried out by the University of Sussex researchers and the University of Nottingham whereby four internet-connected video cameras and microphones were mounted in both the school laboratory and the University teaching room. This gave trainees and their tutors access to live interaction with schools. Both inservice and preservice teachers were involved. Data was collected within the two-year period over which the study took place.

In 2005, prior to the project, initial semi-structured interviews were conducted with two University tutors and the mentors in the six potentially participating schools. These interviews were aimed to establish the expectations of the project. In the summer of 2006, interviews with the two teachers who were at the time participating in the study and three University tutors followed the preliminary interviews. In continuation with data collection, 29 of the 32 trainee science teachers who formed the 2005/2006 cohort completed a questionnaire in which were both open-ended and closed-ended questions were included.

University tutors were able to make use of contemporaneous examples of every day, 'unscripted' classroom activities to illustrate their teaching in a flexible and responsive way. Trainee teachers were able to experience the same example of classroom practice at the same time, a sort of group observation that would not be possible without the use of technology in this way. Group interviews were also conducted during the spring and summer of 2007 on eight student teachers, seven mentors from partnership schools, and three University tutors. All of the interviews, including the group interviews, were between 20 minutes and one hour long, and were mostly conducted in the University of Sussex or a partner school. All were transcribed for analysis and the

collaborative data analysis took place through face-to-face and email exchange analysis and the meetings. Data was subjected to preliminary inductive analysis to identify emergent themes which were subsequently further developed via detailed analysis of transcripts using NVivo software.

The findings suggested that experienced teachers could play a very crucial rule in mentoring their new colleagues' initial training. Working alongside experienced teachers was considered a boost in the acquisition of the required skills necessary to transform a novice teacher into an expert since working side by side provides greater opportunities to observe, listen, and participate in didactic activities. This is different from van Es (2012), with the famous idea of "community learning" which enabled teachers to learn from each other with video of instruction simply providing the learning context. Marsh, Mitchell, and Adamczyk, (2010) appear to be subscribing to the idea of video modeling which has been noted to teach negative lessons if not checked through analysis. However, this study noted a reduction of timidity because the inservice teachers observed expert teachers in real class time but via video. The exercise suggests that video has the potential to develop the trainees' observation skills and develop reflexive thinking to provide authentic illustration of classroom practice, enable remote observation skills, and facilitate the coaching of trainees by mentors. The time lapse of two years of data collection and analysis was a strength to the study which contributed to its validity. This method brought trainees face to face with real class time activities affecting neither the class nor the participants as compared to physical observation. In spite of the fact that classroom theatrics were reduced in this research because the live activities were observed through video, observations alone do not construct the teacher. Simple classroom observation has

proven to be less efficient than originally thought. Many obstacles make it either difficult to schedule or ineffective when they are scheduled. Due to the difficulties to schedule observations, which all emanate from teacher availability and lack of authentic criticism for fear of demoralizing the teacher whose class is observed and even lack of concentration during observation because of several distractions. It should be noted that there is a need for interaction and analysis of the teaching in the videos. This has been absent throughout much of this literature.

### **Professional Learning Community**

A collaborative community of learners is a social gathering of learners with a common goal to achieve in learning together from each other with the belief that two heads are better than one. Professional learning communities are groups of educators working together with a collective vision, beliefs or values (DuFour, 2005; Thomson, Greg, & Niska, 2004; Hoaglund, Birkenfeld, & Box, 2014). In addition to this perception is the view of Little (2003), who considers professional learning communities as groups in which new knowledge about instruction and content is constructed. These groups are also avenues where new knowledge and understandings are constructed to suite content and instruction with ample room for the criticism and challenges on old or current concepts and convictions the teachers held about teaching and learning, as well as collaboration (Kirkpartrick, Lincoln, & Morrow, 2006). Teacher professional learning communities are powerful structures demonstrated to improve existing pedagogy and philosophies because they offer the group of teachers opportunities for development. These include the identification of critical student learning, the development of formative

assessment, setting of goals and creating and sharing of strategies to better the success levels of the learners, (Smoker, 2005).

Professional learning communities have become very popular, because of the results they produce, as one of the most effective methods of promoting long-lasting professional development for teachers and educators (Dallas, 2000; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). Experientially, people do not always have the same level of expertise. The learning community is a stage on which learners can share their expertise with one another, thereby enriching each other (Brown, & Campione, 1994). This is a component of social constructivism, which creates an atmosphere for learners to share their knowledge with peers. Normally, every individual has a way of understanding and interpreting information, which may be more or less accurate. In a situation where learners come together to share their understandings, they fill in each other's gaps. Where some were superficial, the ideas of those who are profound will complement them. In this way, they will all be more sufficiently informed. This is advantageous in that it can improve the learning of students. One of the most meaningful ways by which students can be improved is by improving the quality of instruction they receive, and this can easily be achieved via building learning communities for teachers. Some schools are so desperate for learning communities that they use induction seminars to construct these learning communities, especially for beginning teachers, believing that the teachers would be able to learn from one another in that environment (Fresko, & Nasser-Abu Alhija, 2015).

Recent research points to the fact that professional learning communities have the potential to positively impact the instruction of teachers involved in the group work that

subsequently helps to improve student learning. In a study conducted by Dallas (2006) at an urban middle school, visible changes occurred regarding learning outcomes that were induced by the learning community. These changes produced as a result of the teacher learning community improved student scores on a standardized reading test at a level that had not been seen in that grade for the past six years. Further, the learning community was suspected to have a strong influence on the long term retention of the teachers.

Monthly professional development workshops helped teachers to bond with each other, as well as the schools. This gave them courage to accept ownership of the knowledge created during the learning community workshops. The teachers measured their students' growth by their own local assessment rather than the standardized test results that were relied upon previously (Borrero, 2010).

#### Conclusion

From the totality of the literature on the use of videos of instruction for the professional development of inservice teachers, it becomes evident that the studies done in this area are narrowly focused on video analysis of instruction without facilitation.

This explains why most of the study results consist of reports from the teachers. Within that context, it is very impressive that this literature helps us to see how teachers are encouraged to speak out in a social context because this aligns with the assumption of social constructivism about knowledge creation through exchange and sharing.

Nonetheless, it leaves readers wondering what the downsides of such an exchange comprising of mainly contrary opinion could be. I believe the literature in this research has a shortcoming in that the research did not report any negative findings. For example, helping teachers to be able to notice learning and learning challenges is a good idea but

that is not in itself a solution to the lack of varied professional development methods. Teachers need to be given the motivation to be able to use the acquired information to better address learners' potential challenges. Teacher reflection is a pivotal aspect of the profession, but it also has negative qualities especially depending on who is doing it and for what purpose. Zeichner, and Liu, (2010) reflected on teacher professional development and exposed the weaknesses of reflection in teacher education especially when it is narrowly focused and utilized primarily as a tool of domination and control to diminish teachers' active involvement in the critical thinking process of educational foundation. Worse still, utilizing solely their self-reflection method for professional development may render making community learning among teachers out of the question, which is contrary to the social constructivism theory of learning.

The intention is not to claim that videos of instruction are the best tools for intervention. Apart from technical hitches that can be damaging to the use of videos of instructions, there are other more critical downsides to it. First, the videos must be of good moral and pedagogic standards. Without these qualities, teachers could be introduced to negative learning which is learning the unintended lesson. For example, a video, which contains sexual or racial slurs, could be an example of negative teaching because the teacher would have learned something that was intensified and perceived by him or her as negative. Secondly, videos of instruction may cause classroom management to shift because of the shift of the role of the teacher. The teacher's role is no longer a simple instructor but s/he becomes a facilitator. Scaffolding overtime shifts from role of teacher to the role of facilitator to the learning group aligns better with the scaffolding discussed in the social constructivism theory which provides support for learning and

cognitive growth (Borko, 2004). Understandably, management issues can be an obstruction to the lesson and its success. Finally, the effective use of videos of instruction requires adequate training and facilitation, which can be lacking. In most cases, teachers are not likely to be able to get the best out of videos of instruction without initially receiving proper training (Berk, 2009; Tan, & Pearce, 2012).

#### **CHAPTER III**

# RESEARCH DESIGN METHOD

### **Theoretical Framework**

Chapter three comprises of a systematic description of the research design and methodology that was employed in this study. The chapter is organized into individual sections that provide a framework within which to describe the research plan. A statement on the purpose of the study is provided, followed by the specific research questions that guided data collection, and concluding with the analysis procedures utilized for this study. Special attention is paid to clarify the role of the researcher before a comprehensive research plan is sketched out. The methodology chapter ends with a summary, which reveals and discusses the connections between the main sections presented as comprising parts of the research design methodology for this study.

The literature on the impact of video of instruction and facilitated videos analysis of instruction on teacher professional development suggests that teachers can benefit from the videos in such a way that their teaching and students' learning and achievement is positively affected. Data from research participants indicate that it would be beneficial if facilitated video analysis of instruction were included as part of the subjects within the curriculum of inservice as well as preservice teacher education (Borko, Jacobs, Eiteljorg, & Pittman, 2008). I investigated this research project using the lense of Vygotsky's Constructivism, which emphasizes the fact that the accumulation of knowledge enhances epistemology (Powell, & Kalina, 2009).

#### **Qualitative Methods**

Qualitative research has been defined in a variety of ways. In their definition, Strauss and Corbin, 1998; and Marshall, and Rossman, 2014, described qualitative research, as any research that produces findings not arrived at by statistical procedures or other means of quantification. It can also denote research conducted about people's lives, lived experiences, behaviors, and emotions, as well as about organizational procedures, social actions, and existing cultural phenomena (Maxwell, 2013).

The primary reason that qualitative research method was utilized for this study is embedded in the definition of qualitative research. As planned, the study is investigative by design, which aimed to investigate the perceptions of teachers regarding videos of instruction and teacher professional development. The various thoughts and ideas inservice teachers had of videos of instruction to explain how well conducted Facilitated Analysis of Video of Instruction (FAVAI) can impact the participants and other school stakeholders are explored. Meaningful data was collected that would be relevant the study by conducting interviews, administering open-ended surveys, and analyzing documents. This was achieved by studying participants in their natural setting to better understand their thoughts and feelings via their stories. Without the need to count, measure, or provide statistical validation of the findings, the qualitative research method proved to be the most plausible method utilized to obtain adequate data for this study.

#### **Constructivist Theoretical Framework**

This study was carried out within the theoretical framework of Vygotsky's (1978) theory of social constructivism. Social constructivist epistemology posits that knowledge and truth or facts are created by society. We are male or female simply because society

decides so based on an established set of criteria. Meaning is only meaning because we, as a society give it meaning. Since the 1990's, social constructivism has strongly impacted and influenced educational research, particularly. Constructivism is a theory that closely connects knowledge to meaning describing what knowing is and how one comes to knowing (Fosnot, 2005). There exists several variations of the Social Constructivist Theory of Learning (Fosnot, & Perry, 1996), all of them have a convergent point about epistemology agreeing that learning is about defining meaning or making meaning.

In line with constructivism, learning requires the individual analysis of a concept or thing by creating a signifier in the mind to denote a concrete object or concept. This means that when social interactions are designed to enhance learning or create knowledge, the meanings of these interactions can only be understood by those working within the constructivist learning principle (Gergen, 1999). This theory leans on three main assumptions about knowledge: that knowledge is socially constructed within a social context; that meaning or reality is socially attributed; that learning is a social process which does not occur in a single individual and is not a passive development of behaviors shaped by external forces, but a result of group engagement in social activities (McMahon, 1997; Vrasidas, 2000). If we adhere to the constructivist perception of knowledge and meaning, then we are made to understand that knowledge is not an objective truth stored somewhere to be forced down the throats of learners, rather, it is a continual human effort to enlighten understanding. Active learning demonstrates that a group together possess more knowledge than individuals do. However, the group members may all need some support up front from the facilitator and then as time goes

along, expertise is built in the group itself. In this way, the scaffolding bears part of the group's dynamics, over time, and the group members scaffold each other.

Vygotsky's variant of constructivism differed from Piaget's who believed that meaning-making was the process of reaching a balance between assimilation and accommodation of new knowledge by learners a process that begins with the individual. Vygotsky, on his part, believed more in the influencing social interaction, language and culture on learning (Fosnot & Perry, 2005; Vrasidas, 2000). He accentuated the role of dialogue and social interactions in learning and the understanding of meaning. To him, all learning began with some social interactions and not simply the assimilation and accommodation of knowledge (Fosnot & Perry, 2005; Vrasidas, 2000). In his perspective, Vygotsky believed meaning-making is the process of sharing various perspectives and experiences in communities of practice (Vygotsky, 1978; Vygotsky, 1980; Lave & Wenger, 1991). He was not only interested with the development of the learner as an individual, but more importantly, the role of scaffolding provided by the social contexts, and the role of peers in their efforts to cross-examine, explain, and negotiate knowledge. In a nutshell, Vygotsky's standpoint on constructivism is that meaning-making is the process of sharing various perspectives and experiences with learning communities (Vygotsky, 1978; Vrasidas, 2000).

Because learning, according to social constructivism, is derived from rich conversations with other people who may share common or different perspectives depending on their life experiences and exposure, social constructivism is the most suitable theory to be utilized for the framework of this study. It shaped the study design and research questions, given that the study centers on participants and the facilitator

sharing different experiences within a community of learning. As an educational theory, social constructivism assumes that knowledge is socially constructed from interactions and experiences of individuals within their environment. This aligns with my study, which brought together a group of inservice teachers who interacted within that community of practice to share, debate, and negotiate new understandings and create knowledge. The prompts and interview questions provided added to the video context to create a learning platform enabling the participants to integrate prior knowledge with unfamiliar knowledge to create new knowledge and greater understandings (Taskin-Can, 2011). These prompts combined with participant contributions to form the scaffolding for group learning.

Scaffolding is the support or prompts that learners need to be able to understand new skills and concepts or make meaning of knowledge. Learning by beginning from the known and progressing to the unknown is a form of scaffolding because it creates the possibility for the learner to use previous knowledge to support the understanding of new or unfamiliar knowledge. The appropriate scaffolding gradually shifts the responsibility of learning from the teacher to the student until the learner becomes more independent. With that understanding the students learn in different ways, scaffolding falls in line with my study design as the participants were expected to be able to notice the learning challenges of their students so as to be able to remediate them via scaffolding; and also contribute to the scaffolding of each other until they become independent to create their own concepts and skills. Learner confidence is a king pin in scaffolding that explains why the literature described that videos of instruction may impact teacher confidence depending on the context in which it is used. When the teacher participants learn the

importance of confidence in learning, they would be expected to pass it on to their students.

My study sought to examine if the participants found the BVP course scaffolding helpful within the context it was used that the principal investigator created an open sharing platform where participants were supported to understand the practice in a new way. Participants were exposed to knowledge they were unfamiliar with before taking the course and through the support of peers that came in the form of discussions, debates and explanations, they came to assimilating the new understandings. The learning community in which they were viewing and analyzing the videos facilitated their learning. This community of learning which was created for that purpose resulted in mutual learning, giving participants the opportunity to better understand challenging concepts like classroom observation, classroom management, and other issues and concepts not fully mastered yet. Scaffolding was seen in most of the activities and findings like learning through reflection. The video contents and my role in prompting participants provoked reflections from them, which also resulted in learning (Collin, Karsenti, & Komis, 2013; Harvard Project Zero, 2003).

Some concepts of classroom management and teaching methods that are only suitable with particular student demographics came to limelight because participants scaffold each other to create better understanding. For instance, learning has a lot to do with students' psychological preparedness, their socioeconomic backgrounds, and other demographics. If a teacher keeps these items in mind while preparing and executing a lesson, the success rate is likely to be higher than when teachers did not consider student demographics in lesson planning. All these came to be understood via the power of

analysis of the videos. Watching and analysis the videos of instruction together in a group or what Vygotsky (1978) calls a learning community, was studied for the effectiveness in deepening the understanding of participants. This too, came to be known as the consequential impact of analyzing videos of instruction in a group. Participants supported each other to progress in the course to a level where they became confident and capable of standing on their own.

This study sought to investigate five BVP inservice teachers' perceptions of facilitated videos analysis of instruction in relation to their own professional development. This study aimed to build a community of learners among this group of BVP teachers-participants because of the advantages social community has on learning. Active group learning has proven to be more effective as opposed to learning independently because when people come together, there is a chance that someone has the right answers or information that is needed for learning (Powell, & Kalina, 2009). The members of the learning community could collaboratively shape a topic, a concept or a theory to become useable, whereas, individually it would be more challenging.

Social constructivism was chosen because it is the most appropriate theory in this research due to the correlation it has with my study and the construction of knowledge within a social context like the teacher participants were going to construct. This study was designed was to investigate inservice teacher perceptions on facilitated video analysis of instruction within a community of learning. Participants were going to be involved in supporting each other within this social context in creating understandings and new knowledge. This lines up with social constructivist epistemology, which theorizes that knowledge and truth or facts are created by society. Thus, the society

created for the course was going to serve as the platform for the participants to develop each other as well as themselves within the video context.

Based on social constructivism, three principal assumptions of knowledge, learning and reality exist—knowledge, reality, and learning are all socially constructed. Lending from social constructivism, learning can be achieved through scaffolding. Because social constructivism assumes that knowledge, learning, and reality are socially constructed within a social community or context. This study was designed to give the participants a free hand to use their previous knowledge to generate new knowledge using videos of instruction as a platform (McMahon, 1997). I, the principal investigator, served in the role of facilitator, promoting learning by introducing Socratic type prompts that caused the participants to think deeper and to find answers to challenging questions and situations.

## **Research Design**

The qualitative research design addressed my research problem and research question for the following reason. The nature of my research and the research questions, involved extracting participants' perceptions on video analysis of instruction in their professional development and prompted participants to speak of their experiences, understandings and beliefs. This typically requires the use of interviews and surveys which were the primary data collecting methods and types utilized for this study. Thirdly, the sample size for qualitative studies can be as small as one participant, so this worked well for the small number of participants in this study. "Good qualitative research ought to confound issues, revealing them in their complexity rather than reducing them to

simple explanations (Wolcott, 2001). For all these reasons, I thought qualitative design was deemed the most appropriate for this study.

The study was conducted at a middle school in the Midwest involving a group of five inservice teachers from the same school district. The teachers signed up for the free Bakabaka Video Pedagogy (BVP) professional development course being taught for which a grade of pass or fail was given to them at the end of the course. The course was to serve as their usual continuing education credit. The group met once a week for eight weeks. The first week involved familiarization and introductions. The second week featured the pre-interviews, which were carried out on a one-on-one basis. In the third week, the group started watching the videos and analyzing them. I administered an anonymous online survey mid-way into the course to all the five participants. I also asked them to write a reflection on the importance of videos of instruction for teacher professional development, which they did. Participants viewed and analyzed six videos in all. At the end of the course, the final post-viewing interviews were conducted. All Institutional Review Board protocol was followed before, during, and after conducting this research. (See Appendices A and B.) The study was subdivided into the following six phases. The first phase constituted pre-study interviews in which participants were engaged in a 30-60-minute individual interviews prior to viewing the videos as a group. These pre-study individual interviews were audio recorded for transcription and analysis. The second phase comprised of attentively viewing and taking notes of lessons from the online videos of instruction that featured teachers unknown by the participants. After viewing each video was followed by focus group interviews and discussions specifically based on the observed video, which were the third phase of the study. Phases two and

three were repeated six times over several weeks. Each video was 10-25 minutes long and discussions of each video in the focus group lasted for 30-45 minutes each, which immediately followed the viewing of the video.

In phase four, participants completed an anonymous midcourse individual openended online survey about their perceptions of the video analyzing experience regarding
their professional development. Participants also completed written assignments in class,
which were submitted to me, and these artifacts comprised the fifth phase of the study.
Finally, the post viewing individual interviews were completed as the sixth and final
phase of the study. All focus group interviews, individual interviews, individual openended surveys, and written artifacts from the participants' discussions and the surveys
were audio recorded. Data were collected, coded using systematic coding (Vaughn, &
Turner 2016), and analyzed for patterns and assertions, which identified the perceptions
teachers had about video analysis of instruction and teacher professional development.
According to the study plan, there were no experimental procedures in this study.

This research was designed as a descriptive study with the aims of investigating teachers' perceptions and describing the results explicitly for the understanding and benefit of teachers. This descriptive design is found to be suitable for this study because the research required the use of interviews and surveys to reveal participants' perceptions on Facilitated Video Analysis of Instruction, as this process relates to their own professional development. Although the descriptive design is used in both quantitative and qualitative research, it was found to be the most plausible option for this study because this design answers the "why" "how" and "when" questions specifically linked to my research questions.

### **Research Questions**

Research questions guided and directed this study both theoretically and conceptually. The goal of research questions is to determine the type of research to be conducted. They also identify the specificity of the study, giving a sense of its boundaries and main goals. Good research questions must be clear, straightforward, and void of ambiguity (Maxwell, 2005; Berg, Lune, & Lune, 2004; Mays, & Pope, 2000). To fill this need, the following research questions were investigated in this study from the teachers' perspectives:

- 1. How would facilitated video analysis of instruction by inservice teachers enrolled in the BVP course impact their professional development?
- 2. a) How might this professional development influence their learning community? b) What might be the possible lasting outcomes of this experience?

The following sub-sections will identify the participants of this study, describe the procedure for collecting data, and explain how data was analyzed.

## **Background**

This research took place in a school district located in the Midwest. This district school ranges from early head start to high school. The school district has five head start classes, 12 elementary schools, four middle schools, and three high schools. The school district has a student enrollment of 7, 255 students as of April 2016. The teacher respondents suggested that their teaching profession, which is supposed to render teachers as lifelong learners, has yet to inspire them into that state of perpetual learning. Concurring with this assertion is Senge, Cambron-McCabe, Lucas, Smith, Dutton, & Kleiner, (2000). The shortfall of inservice teacher professional development is further

compounded by the lack of a structure for teacher renewal as well as insufficient time for teachers to do individual reflections or observe the practice of other colleagues (Porter, Garet, Desimone, Yoon, & Birman, 2000). In this study, common themes were determined after isolating patterns from respondents' narratives. This opened up the possibility of exploring the ideas of the participants in such a way that researcher bias was checked by creating room for ideas not predetermined by me to emerge.

### **Participants**

The participants for this study were five (5) experienced inservice teachers who self-selected into the BVP course from a Midwestern school district. After an informative visit to the school by the researcher, each participant enrolled in the BVP course for this school district. During my visit to the school, I informed the staff and administrator of the school about my research topic, the purpose of the study, the survey and interview process, and the required informed consent form through which the data would be collected. I had anticipated recruiting ten but only teacher participants six showed up and one withdrew without starting the course. This focus group of five inservice teachers represented a cross section of the teacher population in the Midwestern school district where this research was conducted. Of the five participants, one was male and four were female, and all self-identified as Caucasians.

Participants represented a cross section of inservice teachers who instructed at the kindergarten through 12<sup>th</sup> grade level, including special education teachers thereby maximizing the range of perspectives. Participants consented by signing the consent form, which explained that participation was voluntary and could be discontinued at any time. In addition, participants understood that their decision to participate would not

make or mar future relations with their facilitator, the course grade or me. The benefits of the study were explained to the participants and these included the following predictions: Contributions would influence future teacher professional development programs and helping to improve learner outcomes; and lastly to find out if the process to improve student learning could enhance teacher dialogue. Participants were asked to include their email address so the survey link could be sent directly to them and readily accessible.

The five respondents in this study were given the following pseudonyms: 1)

Agnes 2) Jeremiah 3) Carine 4) Maree, and 5) Wilma (figure 1.)

First, Agnes is a Caucasian female teacher in a Midwestern school district, who teaches middle school 8<sup>th</sup> grade science and English classes. She has over 10 years of teaching experience, and she is very disciplined but lively. She loves her job and her students but hates the way the teaching profession keeps teachers excessively busy. Paradoxically, Agnes does not like teachers to stuff students with rules and regulations, which they must comply. She has the feeling that every now and then something new is added on the school program that would cause the teacher to lose leisure time. In all conversations regarding the study, she made it clear that she would not advocate for the addition of anything else on the school curriculum even if it were coming to make teaching and learning more effective.

Agnes did not seem to like the educational system in which she is employed. She complained that too many things keep piling on the teacher, leaving them with little time to refresh their minds and brains. In her classroom, she is very orderly and systematic. She likes to see all her students succeed. Prior to her recruitment for the study, her

expectations were that her videos were to be viewed and analyzed. From all her expressions, she does not like to make mistakes so she takes a lot of caution to avoid them. This was evident in the interviews where she would answer a question and insist to know if she gave the right answer. Even when assured it was OK, she would add that she was going to do better in subsequent interviews because by then she would have gain much insight into facilitated video analysis of instruction for inservice teachers. About striking a balance between work and leisure, Agnes is a good example of a teacher who knows how to achieve that balance. By the time this project was ending, she had taken a one-week leave of absence from work to go and have fun with her family somewhere around the lakes and cities.

Second, Jeremiah is a Caucasian male 6<sup>th</sup> grade teacher in this school district and the only male participant involved in the study. Jeremiah is kindhearted and generous as he readily gave me a ride on the day I went without a car. He never stopped to ask if I would need a ride. At the end of the classes, he stayed behind to turn off the lights, roll up the screen and shut the doors and windows. He teaches history and social studies. He is very pragmatic and practical in his teaching. Jeremiah is a very talkative and comical person who makes sense each time he speaks. He has an unquenchable thirst for knowledge, and when he meets someone who seems to possess new knowledge, he sacrifices time to get a pinch of it. He also reads widely to improve his knowledge. Regarding this study on the utility and value of inservice video analysis on teacher professional development, Jeremiah inquired about when I think the results of the research were going to be applied in his school district. This illustrates how focused and thirsty for knowledge he was unlike his colleague who said nothing extra should be added

on the workload, which is already overwhelming to her. Jeremiah is not too proud to acknowledge that he has many more things to learn like many other teachers, making him a good student of pedagogy.

Jeremiah stated that he had been using videos of instruction for quite some time but he was not yet confident he could give an acceptable definition of video of instruction or say how effectively they could be used. He feels some teachers felt bound by their profession and as a result were not eager to share knowledge like him. He has a record of over 10 years of teaching experience, and he is ready to go on to new levels of improvement in his craft. His expectations before his recruitment were that individual participants' teaching videos were to be viewed and discussed during the course.

Third, Carine is a very talkative and loud-voiced teacher working in an early child hood center in this school district. She is the lone special education instructor who participated in this study. She likes her job, but feels like special education is difficult to deal with very little attention is paid to this sector, which also has a myriad of legislation governing it. This makes learning cumbersome because the process to obtain parents' consent before making videos of their children is the main reason for which videos of instruction for students with disabilities are rare, rendering Carine a novice as far as video of instruction for teacher professional development is concerned. She had little or no experience with video of instruction until she was recruited in my research team.

Nonetheless, she came with great expectations but insisted she would not like her videos viewed for analysis unlike her colleagues. Her reason was that she is not confident enough to let other teachers who might be more experienced than she, to watch her teaching. After her first experience, she said she would be happy to attend more such

sessions to better understand her profession. She is the least experienced of all other participants, with just four years of teaching.

Fourth, Maree is a female early childhood educator teaching a diverse class of Head Start, and has been teaching for more than five years. Marie appears to be a recalcitrant person but does her job judiciously. I based my judgments on her statements, which more often than not, she backtracked them. She is very intelligent in her arguments and discussions. She is said to have implemented many of the lessons learned from the video analysis of instruction experience even before the session ended. Upon visiting her class for an interview, she showed me several things she was doing that she was not doing before until she learned from the FAVAI expedition. This shows how open and eager she is to learning and adapting new ideas. Maree portrayed an unusual but positive boldness in taking a stance all alone during the video discussions even when everyone else opposed her opinion.

She said she knew what was good for her kids and would not trade it for anything. For instance, there was a video of instruction in which the early Head Starter students were given many routines and orders to follow. Other participants saw it to be compliance, which they hated so much but Marie stood her ground saying that was good for the level she was teaching. In her classroom, she also shared with me that even when methods and tools were not for the level she was teaching, she creatively adapted them to that level.

Fifth, Wilma is a very experienced teacher in the school system in the serving as a professional developer and coach. She is one of the four Caucasian females comprising the research group. She has taught almost all grade levels and has conducted professional

development seminars and workshops for teachers in various states and for several occasions. Wilma is familiar with videos of instruction for teacher professional development. When asked at the beginning of the study why she registered for the course, responded that she wanted to have a better understanding of videos of instruction in relation with inservice teachers because she is a coach for teachers in the school district. She is methodical in all her dealings, even in the way she speaks. She is time conscious, neat and very hygienic. Wilma shows support for professional development without restrictions. For want of videos of instruction, she had teachers she was coaching review written student dialogue developed by researchers for the purpose of reflecting on instruction. They were read out loud to sound like videos of instruction. She is also the most cautious of all the participants in this study. Wilma likes to know more and more every day. According to her, learning is her hobby.

Table 1. Participant Descriptions.

Name	Sex	Race	Class Taught	Experience
1) Agnes	Female	Caucasian	8 <sup>th</sup> Grade	10 years +
2) Jeremiah	Male	Caucasian	6 <sup>th</sup> Grade	10 years +
3) Carine	Female	Caucasian	5 <sup>th</sup> Grade – Special Ed	04 years +
4) Maree	Female	Caucasian	Early Childhood and Special Ed	05 years +
5) Wilma.	Female	Caucasian	12 <sup>TH</sup> Grade/District math coach and professional developer	10 years +

## **Instruments and Criteria for Videos of Instruction Selection**

The teacher participants expressed that rather select their own videos of instruction, they preferred the researcher identifies and provides them based on their lack of time to find the videos. Videos guidelines request that required the videos be morally upright, that they should not speak the language of violence, and should not contain sexually explicit material. First, I was provided the website, recommended by the district for teachers to visit and find videos of instruction and watch individually when they have time. This website featured the Marzano model of instruction, and included which has several videos of instruction on different aspects of classroom practice. The teacher channel, otherwise known as the Teaching Center, was another source rich in videos of instruction. Lastly, the YouTube channel also proved to be a good resource, except that finding suitable videos of instruction can be difficult because of the large number of poorly constructed videos available in that channel. The videos were not readily found in a convenient package form, but some were categorized in a playlist format depending on the search criteria, which included teacher motivation, classroom management and effective teaching (pedagogy) Of the videos viewed prior to selection, some were more suitable than others in terms of clarity, sound quality, topic handled and the virtual teacher aptitude. Another criterion for selection was the length of the video. I needed videos, to be limited to between 10-15 minutes long, thus, longer video clips were eliminated.

Three topics were covered in the BVP course: classroom management, motivation, and effective teaching. Therefore, the video selection was based on these topics—three videos per topic. The content focus of the selected videos was as folloInws:

Video 1: High school male teacher teaching physics through many experiments to motivate students. In this video, a very experienced science teacher uses experimentation and pragmatic teaching to capture the attention of his students. Because of his motivational style, his students are very fond of him and in an interview with a reporter; they mostly say positive things about him. For example, one student says no one likes to miss his lessons because they are very entertaining and educative. He creates a cordial relationship with his students and even confides in them about his struggles at home, which builds trust in the students.

Video 2: Elementary female teacher demonstrating classroom management strategies. This teacher is very skilled in classroom management especially at the grade level she teaches. She organized her students and instructed them to hand her their assignments at the doorway before stepping into the classroom. In the same way, she hands them new assignments at the door before they come into the class. They have a particular way of asking or answering questions. When she wants them to be attentive, she has them clap their hands, and bang their desks lightly, rhythmically. After that, they were usually attentive to the teacher.

Video 3: High school male teacher showing classroom management in a very diverse classroom setting. This video demonstrates classroom management in the heart of diversity. The class is made up of several ethnic groups. Diverse classrooms are the most difficult to handle, according to experienced teachers. When children come from various backgrounds and homes, they bring with them different challenges too. However, this teacher is able to create the required confidence they need most to be able to study and learn. He seemed to suggest that students from diverse racial background have a problem

with self-esteem, which is not unfounded. He makes an effort to create an atmosphere of trust among his students. He provides positive reinforcement when he stays back in class one day just to congratulate one girl who behaves well for the first time. He tells her that he has much confidence in her and believes she is capable of making it at the end. This is very important because some teachers tell students they are unfit for academic work, which is entirely unacceptable in this profession.

*Video 4:* Fifth grade female teacher managing her class with little diversity during reading.

This teacher's lesson is focused on management and she shows a lot of dexterity in managing a class, which comprises of about 30% of racial diversity. One of her most effective aspects of management is in her ability to have students to interact in learning communities without chaos. She gets them together by doing some sort of random sorting and makes sure the students work in a particular group only once. She makes sure they do not get too familiar in the groups and start having out of class discussions as a result. In her class, she holds three to four interactive group discussions before changing the topic and the students seem to enjoy it. This likely contributes to why they remain orderly.

*Video 5:* Sixth grade male teacher fostering motivation of students in a highly diverse classroom. This teacher is very creative. He applies several methods to mobilize his students to work. For example, his students like it when he tells them, "You have to R.E.A.D a B.O. for them to respond O.K. At first I did not understand this but when I asked the participants, they explained to me that he just meant they needed to read a book but stopped at the letters bo- expecting them to complete the word "book" by adding "ok" (bo+ok = book). He makes reading easy for them by providing scaffolding for them. To

ask his students to study the character traits of the characters in the books they are reading, he begins with himself. They have to examine his character traits before going to the book.

Video 6: Sixth grade female teacher motivating students to learn mathematics. The motivational tactics of this teacher were centered on helping the students to gain self-confidence. She starts by reminding them that if they are in that class, it is because they are able to be there. For that reason, there should be no complex to hinder them from surmounting every obstacle. This builds up the confidence level of the learners and they begin the lesson with confidence. Wherever she found a student committing errors, she would say, "You were a little distracted here. This is not all you can do". All her students feel they are able to do exceedingly well beyond their expectations. Data Collection

#### **Data Collection**

Data collection methods in qualitative research must be carefully selected in such a way that the method is most appropriate for the study. This explains why interviews, observation, focus groups, and documents are most appropriate for collecting qualitative data. Five principal data collecting techniques exist which qualitative researchers utilize. These include:

- 1) Participation in the setting or participant observer, which gives the investigator the opportunity to have a holistic understanding of the phenomenon under scrutiny.
- 2) Direct observation, which leaves the investigator as an outsider who is only viewing the inside from outside.
- 3) In-depth interviews, which constitute the use of structured or semi structured open-ended questions to extract information from participants.

- 4) Group analysis, which sets up group interactive discussions with the use of short questions, prompts, and interjections.
- 5) Document analysis, which is the inclusion and analysis of documents that participants produce in relation to the topic investigated (Marshall & Rossman, 1999). For the purpose of this study, four types of data collection, with the exclusion of observation, were utilized.

Data collection was conducted methodically as follows: The first data collected was through individual one-on-one interviews. This was followed by the focus group interviews. The third source of data came from an online, mid-way, anonymous individual survey. The fourth data resulted from written documents from assignments given to the participants, and finally, the fifth data source was the concluding of post-analysis and post-viewing individual interviews. The survey and interview questions can be found in Appendix C.

#### **Interviews**

#### Pre-interview.

Glesne (2011) explains that the strength of interviewing is "the opportunity to learn about what you cannot see and to explore alternative explanations of what you do see" (p. 104). Interviews were one of the means of data collection for this study. The purpose of using interviews for this particular study was to understand what inservice teachers think about the impact of video analysis of instruction on their professional development. From the six inservice teachers who became participants who indicated interest in this study, five of them took part in 30-45-minute interview regarding video analysis of instruction and teacher professional development. The interviews were

conducted in both public and private places convenient to the participants. These included private homes and the participants' respective schools/classrooms. During the interviews, a series of questions was asked (for example: What is your experience learning from your peers? What can you tell me about the use of video of instruction? In what ways can students benefit from the FAVAI which you are taking?), Notes were taken of key ideas, and follow-up questions were asked.

## Survey.

Midway into the BVP course, the participants were given a 12 question openended survey to determine their impression on the topic. The questions were created via
Qualtrix and the link was emailed to the participants through a class email. All the
participants responded anonymously to the survey, which was analyzed for this study.

The questions ranged from "Why did you register for this course? (Give all reasons)." To
"What do you think your colleagues who did not take this course are missing? What are
the pedagogic techniques from the video analysis you would like to try in your
classroom?" The participants responded promptly and their responses were downloaded
on SPSS. The purpose of completing the survey was to not only tap into their perceptions
on the topic, but also to have a good backing for triangulation.

## Focus Group Analysis.

Participants were administered the 30-minute focus group interview in their group of five after each video was watched. The group and I sat round a table to respond to questions with me playing the role of the moderator. During watching I always reminded them of the necessity of taking written notes. I assured the participants of the freedom to say what they felt, regardless whether or not their colleagues shared their opinion. I also

informed them that we all were involved in the learning process in which no one had a superior idea of the subject matter. In this manner, power was evenly distributed among the participants. As they spoke, I took notes of the salient points they made. Questions like "What do you think about the lesson? What do you like or not like about it? Explain why. What were the strengths of the teacher? How do you know if the students were learning?" were asked as well.

### Post Interviews.

This 30-45 minutes final interview came to close the study. Having analyzed several videos of instruction, participants' post-viewing interview served as the sum total of the teachers' impression of video analysis of instruction to teacher professional development. Both interview questions ranged from "What is your experience learning from your peers?" to "What factors render video analysis of instruction by teachers important for teacher professional development?" Please state as many as you know". What does video analysis of instruction by teachers mean to you? Why should video analysis of instruction be included or not included in inservice training curriculum? Please, explain your reasons." Both interviews were audio recorded and later on transcribed and analyzed.

(Additional interview questions can be found in Appendix C)

#### Documents.

Documents are an important component of the data because they relate directly to the topic and were produced during the course. They also serve as a means of ensuring triangulation. Upon request, participants emailed their responses to questions asked of them about video analysis of instruction and its impact in the classroom. They were also

asked to respond if video of instruction has some qualities that classroom observation does not have. Their written responses were analyzed as part of the study because the question centered on the core of the study, which is the usefulness of video of instruction to inservice teacher professional development.

## **Consent and Confidentiality**

In order to comply with the confidentiality protocol agreement of protecting participants' identities, all final data and memos were rendered anonymous. The findings were reported without identifying the participants, school, or district. As a means of keeping participants' identity protected, I further assigned pseudonyms as an additional means of keeping their identity safe and managing risk. There were no significant unforeseen risks of any type linked with participation in this project. There were neither concerns nor incidents that arose during the research project.

Before the project started, I provided written consent forms (see Appendix A) to participants to sign before the data collection for this study started. Each participant was offered time to read the consent form and ask questions about anything they did not understand. Furthermore, each of the participants signed the consent forms after which they were given a copy for their files. Data and analysis files are being stored on a password-protected computer and are backed up on an external hard drive. All printed material except for participant consent forms are stored in a safe box and not accessible to anyone other than the researcher. The consent forms are stored in a separate safe from the electronic data. All data, and analysis material both electronic and paper, are very secured. Digital audio files will be deleted after five years and all other data in hard copy will be shredded after five years.

## **Data Analysis Procedures**

I transcribed and coded the interviews, documents and surveys. Coding is a process by which significant statements from the transcriptions are reduced into short phrases that are categorized based on patterns (Vaughn, & Turner, 2016; Attride-Stirling, 2001). I started by cleaning the data. Data cleaning, is editing and cutting off any part of the data that had no direct relationship to the research. For example, greetings, introductory formalities and digressions that were not related to the research questions were omitted. Next, I went ahead reading and highlighting chunks of data that related to the research questions. The highlighted chunks of textual material were summarized into a phrase, sentence or word to create the initial codes. Lastly, I then began to group the codes together under anchor codes I had created from recurrent words in the data (Attride-Stirling, 2001). Data that was collected and analyzed for this study is mainly the data that came from the video analysis of instruction and not from the BVP course which constituted the viewing of video only.

Repeated codes were merged and considered strongly. Initial codes were used as a guideline to analyze subsequent transcripts, thus informing new codes. Following this preliminary code development, significant statements were reread and codes were reorganized to better represent my five (arbitrary) themes. The term "themes" is defined as the tacit, implicit or implied meaning of chunks of data within the context of qualitative research (DeSantis, & Ugarriza, 2000). There is agreement among qualitative researchers that themes are "extracted by a careful mental process of logical analysis of content from all data sources" (Germain, 1986, p. 158). For a final list of codes, please see (Appendix E) Themes will be discussed more in depth, including a table with the

main themes after the exercise has been completed. The themes were then explored via what is called thematic analysis, to derive patterns and assertions, which answered the research questions.

## **Coding Procedure Illustration**

To illustrate the analysis process, the following is how I developed the Mutual learning theme:

The theme of mutual learning came about as a result of coding the following chunks of data which suggested reciprocity in learning among the participating teachers.

Wilma, in her final interview remarked that "The sharing of learning and understanding became more and more natural so that no one was willing to withhold something from another person. The discussion of those videos of instruction breaks down the barriers between teachers so that they come together to rather define this collaborative idea of good instruction."

The codes from this quote are "sharing knowledge" and "collaborative instruction"

In the midcourse survey, Carine felt that "It was very interesting to hear other peers' thoughts and how much they took from all of the structure that was used in the videos. I learned from them that different children at different ages need different amounts of structure and, amounts of direction, and then, I wouldn't even consider that if I had not collaborated with them." Code derived from this statement is "understanding difference"

Maree said in her written document that "I really do think it is more profitable to analyze the videos with others because you gain their perspective on things, you know I

might not have seen or picked out something in the videos that we watched unless they said it then I went back and said "O yeah that is right." You know that sharing and your questioning has really, really helped me, to analyze those videos working together to see what I thought was good or bad or things you can change." Codes from this chunk includes "understood others' perspectives"

Jeremiah in his final interview stated that "Learning is about buying and selling. You buy new ideas from others and sell your own ideas to them. If your ideas are good, they will be bought. This is how we learn and if we do not have exercises like this where we sit and analyze teaching, it will be just a dream that will never come true." The code derived from this quote is "mutual sharing"

Validity Techniques: Validity has been a concern in qualitative research for over a decade now and this is more serious in the US because of Federal government efforts to discredit qualitative research. The *No Child Left Behind* act specified that only rigorous and systematic research using random sampling with the possibility of generalizability is acceptable (Cho, & Trent, 2006; Wilde, 2004). For this reason, I did member check, which has emerged as one of the acceptable means by which researchers ensure that participants agree that the data collected were accurately representational of their perceptions of the phenomenon under study (Koelsch, 2013; Cho, & Trent, 2006).

Maxwell (2013) also discusses the importance of triangulation to ensure validity in results. He describes triangulation as "collecting information from a diverse range of individuals and settings, using a variety of methods...to reduce the risk of chance associations and systematic bias" (p. 128). A qualitative researcher must convince the audience that their study is credible. Researchers do this through triangulation, member

checking, thick descriptions, peer reviews, and audit trails (Creswell, 2000; Creswell, 2012, Creswell, 2007). Of course, not all of these validity procedures are employed each time a research is conducted, but considerations for validity should remain a priority in any research be it a qualitative research or a quantitative research. Following are several methods I used to account for validity in this study.

First, data triangulation was done; this is the process of employing several means of data collection to ensure that multiple perspectives were represented. In this study, I utilized surveys, interviews, focus group analysis, and documents were utilized to validate the use of triangulation (Fenech Adami, & Kiger, 2005). I got thick descriptions of the participant's perception of the usefulness of video of instruction to teacher professional development and teacher reflection, and how they were informed about their own profession. Participants spoke as much as they wanted to without interruptions or breaks. Secondly, I did member checking which constitutes allowing the participants to crosscheck the transcripts to be sure their opinions were not misrepresented. The text was then transcribed as it was recorded verbatim. After transcribing the interviews, they were sent back to all the participants to complete the member check exercise (Cho, & Trent, 2006; Creswell, 2000). Only one of the five participants asked for two words to be changed to make an accurate representation of her impression of video of instruction on inservice professional development. The rest were satisfied with the transcription.

Finally, I was aware of researcher reflexivity throughout the analysis process, and that biases can threaten the very heart of qualitative research. Therefore, it is important for a researcher to understand his/her biases during the data collection and analysis process. I approached interviews with my set of IRB approved questions and the

participants were allowed to do the talking. This allowed them to do the talking. I then asked for clarifications when appropriate and kept personal opinions and thoughts about teacher professional development out of the dialog. I did much of Socratic questioning which constitutes prompting the participants to speak out.

## **Data Analysis**

Qualitative data analysis is a composite and interconnected process used to get to the meaning or findings of a qualitative research. It is the relationship between unanalyzed data, the process used to organize and interpret the data, which goes through transcription, coding, categorizing and the emerging assertions leading to the final or temporary findings (Caudle, 2004; Miles, & Huberman, 1994). Data analysis, as defined by LeCompte, & Schensul, (1999) is the procedure by which researchers methodically search and arrange the transcripts, fieldnotes, ethnographic notes and other material deemed connected to the research topic and necessary to help bring out trustworthy results from the research.

Data analysis has two goals. The first goal is to understand the perception of the participants, and the second goal is to answer the research questions. Rossman, (1999) defined qualitative data analysis as the organizing and attributing of meaning to data. Data collection is preferably done simultaneously with data analysis as to be able to shape interview questions to focus on the research questions (Coffey & Atkinson, 1996). In this project, data collected from interviews, surveys, focus group interviews and documentations were all transcribed and prepared for a three level analysis (Maxwell, 2005). Primarily, the data underwent data cleaning. This is the stage at which I eliminated all unnecessary materials found in the data that are unrelated to the research questions or

participant perceptions of the subject matter. Introductory prompts and greetings fall into this category. After reading and familiarizing myself with the data, I started coding. Coding is the procedure qualitative researchers use to concentrate on a bulk of raw data hoping to derive answers to the research questions either empirically or speculatively (Bell, 2014).

Data were coded following three levels of (Maxwell, 2005). The initial level of coding was open coding, which provided me the opportunity to be immersed into the data. Interesting and relevant expressions in the data were coded. This consisted of lumping up meaningful chunks of data together, which was achieved by using a highlighter to highlight the various meaningful outstanding chunks of the data. The goal at this stage was to generate as many codes as could be derived from the data without any limitation, I understood that the codes were going to be subsequently merged into other codes or out rightly dismissed if need be. A list of these initial codes was compiled and frequency tallied. The second level of coding was focused coding, utilized to see what categories would emerge. Categories were generated from the codes by regrouping them according to patterns.

Next third level of coding was axial or thematic coding, which constituted the identification of relationships among the codes. This aimed to ensure that the concepts in the codes were accurately representative of the interview responses. Axial coding provided the themes cutting across the codes, and the possibility of exploring the categories related with the ideas, (Malterud, 2001). The connections within these categories point to the assertion which is suggestive of the perceptions inservice teachers have about video analysis of instruction as related to their own professional development.

# **Chapter Summary**

In this chapter, the purpose of the study, the study design, and theoretical framework are described. This study examined teachers' perceptions of video analysis of instruction on teacher professional development. The narrative design and constructivism was used as the theoretical lens through which the research questions were answered. The research methods were explained in terms of participant selection and data collection.

Data were collected through surveys, interviews, and document analysis. Data were then analyzed by coding, and then forming categories, themes and final assertions. In chapter four, I will present the themes that came out of the data, along with my interpretations of their meanings or suggestions.

Table 2. The Six Phases of the Study.

Phase	Activity	Duration	Frequency
1	Pre-study individual interviews prior to viewing the videos.	30-45 mins.	1
2	Actual viewing videos of instruction that featured teachers unknown by the participants.	10-15 mins.	6
3	After viewing each video was followed by focus group interviews and discussions specifically based on the observed video.	30 mins.	6
4	Participants completed an anonymous midcourse individual open-ended online survey.	15 mins.	1
5	Participants also completed written assignments, which were submitted to me.	20 mins.	1
6	Post viewing individual interviews were completed.	30-45 mins.	

#### **CHAPTER IV**

## **FINDINGS**

In this chapter, I have provided key findings from the study. The main aim of this chapter is to present snapshots of the themes that emerged from the data after analysis. I will start by reviewing the research questions that guided this research. Secondly, I contextualize the research including a definition of the research participants. Then I presented a summary of the themes and attempt to link them to the research questions. This is closely followed by a discussion of data substantiating the themes. Finally, I offered an overview of the chapter.

# **Research Questions**

The narratives of participants in this project sought to address the following research questions:

- 1. How would facilitated video analysis of instruction by inservice teachers enrolled in the BVP course impact their professional development?
- 2. a) How might this professional development influence their learning community? b) What might be the possible lasting outcomes of this experience?

## **Data Types**

I collected data from five different sources:

-A pre-viewing one-on-one interview comprising five open-ended questions, each lasting 30-45 minutes done one week before the beginning of the Facilitated Analysis of

Video of Instruction (FAVAI). These initial interviews were aimed to establish insight and the expectations of the project (Marsh, Mitchell, & Adamczyk, 2010)

-An online individual and anonymous survey constituting 12 open ended questions done on Qualtrics was taken mid-way into the study.

-Two written documents of two pages each on the perceptions of participants about video of instruction and its impact on teacher professional development; they were taken at the end of the course.

-Six unstructured focus group interviews prompting the participants to comment on teachings viewed in the videos. They were taken once every week and they lasted at least 30 minutes each.

-One individual post-viewing interview comprising nine unstructured questions, which was the concluding activity in the study.

Data collection was conducted as follows: the first data collected was through one-on-one interviews. This was followed by the focus group interviews. The third source of data came from an online mid-way anonymous individual survey. The fourth set of data resulted from written documents from assignments I had the participants take. Finally, the fifth data source was the concluding post analysis and post viewing individual structured interviews. All the survey and interview questions can be found in the Appendix section.

## **Summary of Themes**

The themes derived from analysis were scaffolding experience, classroom management issues, learning through reflection, mutual learning among participants, consequential impact of FAVAI, and the power of analysis.

Table 3. Percentage Summary of Themes.

Theme	Title	Percentage
1	Scaffolding Experience	100%
2	Classroom Management Issues	95%
3	Learning Through Reflection	90%
4	Mutual Learning among Participants	85%
5	Consequential Impact of FAVAI	85%
6	The Power of Analysis	85%

# **Scaffolding Experience**

Scaffolding is the support, like resources and coaching, provided to learners to help promote learning of given skills and concepts. Teacher scaffolding came from the video context of the course where: a) participants felt safe and comfortable to express their honest thoughts; b) I facilitated the understanding and analysis of the videos; and c) participants were able to freely develop their understandings through collaboration as opposed to what they had been having during their pedagogic weeks when they only listened to a top-down structured teacher. The participants stated that the professional development experience gave them a supportive skill they had been wishing for to be able to remain life-long learners as their profession entails. With the full day schedule of their jobs, the video analysis of instruction provided a scaffolding opportunity for the inservice teachers.

## **Classroom Management Issues**

Second, the teachers noted that during the video analysis of instruction, they came across many classroom management issues, which were clarified after the analysis of the videos of instruction. Some management skills were required for particular situations and age, level and those teaching at that level would understand why and how it works. This means that classroom management varies from grade level to grade level and the analysis of teachers' pedagogical practices and management styles made this clear.

## **Learning through Reflection**

Third, the participants also commented about the possibility of learning through reflection, which they gained from the study. While they analyzed the videos, they began to think deeply about their own practice wondering how others would appreciate their own teaching. They asked themselves questions each time they were teaching and sought to find out the difference between their teaching and that of some of the teachers on the video, and how such teaching may have as impact on student learning. As reported by the participants, classroom observation can be less likely to provide this deep thinking in a situation where the observer is busy attending to students just like the class teacher.

## **Mutual Learning among Participants**

Fourth, it was generally accepted that the exercise gave way for mutual learning among the participants. As they came together to view and analyze the videos of other teachers, it occurred to them that they became each other's students for they learned enormously from each other. They interacted in ways where they were learning from each other. The sharing provided a good opportunity for the participants to share their knowledge in a way that classroom observation alone cannot do because sometimes when

they go to observe a lesson, they get so involved in helping the teacher that they end up losing focus and doing little or no observations at all. Even when teachers succeed to schedule and conduct a classroom observation, there is still a missing component, which is the analysis. Classroom observations can be less meaningful because they do not necessarily encompass analysis of the lesson. As revealed by the data collected, some teachers do not welcome negative feedback after they are observed. According to this report, participants stated that even if the lesson was not very good, the observer often felt the pressure to flatter the teacher. Other teachers feel that their colleagues are too critical and negative to be taken for guiding advisers. If this is the case, then in such a situation, both parties are disadvantaged because, while the teacher might not benefit from the comments of the observer, the observer on her/his part will have learned very little. A group analysis of teaching within a professional learning community is thus pivotal to maximize the benefits of collaboration can give to teachers (DuFour, & Eaker, 2010; Levine, & Marcus, 2007; Thompson, Gregg, & Niska, 2004). Simply observing a lesson without discussing it eliminates mutuality in the learning process.

## The Power of Analysis

Lastly, the teachers said that the impact of FAVAI made a clean and clear distinction between watching videos of instruction and facilitated video analysis of instruction. From their perspectives, the learning comes from the facilitated video analysis of instruction rather than from viewing the video of instruction individually. It does not provide sufficient support resources for them. Watching a video in which a teacher is teaching would be like classroom observation where there will be no forum for discussions, questions, and answers. This explains why the teacher participants said they

would not like to watch videos on their own, because the real heart of pedagogy is not found in mere observation alone. The videos of instruction that were used were produced by education faculties in universities. There were brief captions of titles and no commentaries in the videos. This helped to distinguish between motivational videos and those designed for classroom management. Those explored were essentially pedagogic, motivational and classroom management videos (Marx, Blumenfeld, Krajcik, & Soloway, 1998). The teaching was as natural as in any classroom setting. The only difference was that it was on video.

Some of the videos demonstrated poor teaching at varying levels and for the purpose of this project, I categorized this demonstration of poor teaching as negative teaching. Watching these examples of negative teaching without guidance would be a catastrophe especially for beginning teachers and subsequently their students. The effectiveness of the videos came from the analysis exercise, which provided strategies to enrich and clarify questions that helped to construct the teachers pedagogically.

## **Consequential Impact of FAVAI**

Fifth on the list of themes the teachers exhibited was consequential impact on the students. Consequential impact denotes the possible outcomes of the professional development exercise on the students they are teaching. The participants insinuated that if they had a good system of professional development they would end up as very good teachers. The ultimate goal in becoming a good teacher is to help students learn. They thought that if they had better professional experiences, that would translate into helping their students to learn more successfully.

# Theme One: FAVAI Provided Scaffolding for the Teachers' Pedagogical Knowledge

The participants had a scaffolding experience in which they had the rare opportunity within the video context to freely construct their own knowledge rather than the usual lectures or top-down teaching they have experienced during their pedagogic weeks. After analyzing the data, six principal themes which related to the research questions emerged. The most apparent theme in respondents' data was that FAVAI provided a mutual scaffolding experience of pedagogy. All of the participants acknowledged that video analysis of instruction by inservice teachers was very helpful to their professional development. FAVAI by inservice teachers provided a supportive experience from responses from the interviews and survey questions. Every participant pointed out FAVAI for teacher professional development as being a supportive experience for the teachers to grow in their understanding of pedagogy, which all thought was good to be encouraged.

Participant Carine, noted in her post interview that FAVAI on inservice teacher professional development has the potential of impacting the teacher professionally in the long run because of the multiplicity of ideas and contributions that result from these analyses, stating:

...I do think [FAVAI] is a good thing and it could definitely help us be better teachers looking at what we did and the techniques that were shared on classroom interactions and all the ins and outs of teaching. I like the video analysis of instruction exercise we did. I think we all brought in a little bit different experiences, different subjects areas, different age groups of kids, everybody had

a different background. Our being able to exchange ideas, and learn from one another is important.

This was a suggestion which pointed to the fact that the exercise can be very helpful to inservice teachers. From the teachers' perspectives, the status quo of teachers hardly having the time to interact with colleagues and analyze their teaching seemed to have been in place for too long and the participants were looking for a way to obtain professional development in this technologically charged age. Jeremiah was very anxious to learn new ways of teaching and helping his students. The lack of professional development opportunities, especially those that would help him to see how he fares in teaching, has obliged him to occasionally take a video camera to his own classroom.

There, he would ask a student to video tape him while he taught so he could view it and see what his teaching looks like. While he struggled to improve his practice, he asked one of his students each time to video tape him. This could have been distracting to the student who needed to be an active part of the lesson. Jeremiah stated:

...we teachers work a job that does not allow us to see other teachers very much, and so now I see that there are other methods that we can't be exposed to...different methods of teaching; different techniques, different classroom organizations. We can plan for growth by working at what has already been done that we can share good common practices in a whole...walk across the team or building or district and emulate the things that we like and maybe try to avoid the things we do not like.

Inservice teachers have been left out of FAVAI types of experiences and the void is hurting the inservice teachers. The deep need for scaffolding exercises like the video

analysis could not be expressed clearer than Agnes who continued to pinpoint the flaws in the current system of inservice professional development. The traditional method that has been used to help reenergize them pedagogically has not been efficient and they are looking forward to something more interactive and engaging. FAVAI seemed to be the answer to meet their needs, as Agnes submitted in her pre-interview.

I think it would be good to see and discuss examples of video of instruction rather than just have to watch someone else teach and you are expected to go and try it in your own classroom with your own kids. I am a very visual learner too so if I see someone doing it and analyze it with colleagues, I will be able to try it in my own setting. The only real experience I have had with video of instruction is on our professional development days. They will show us videos of what techniques they would want us to try and then expect us to go back and try it. Typically, those days are Fridays so by Mondays I kind of forgotten all what I saw.

The participants felt that FAVAI for inservice professional development had a special place in their professional growth as it allowed them the opportunity to see a variety of practices and to reflect on them in a supportive group setting. Professional growth has been nearly impossible without FAVAI because their schedules were too full to allow for time to see or reflect on what others were doing. Maree, in her pre-interview, also expressed the similar feelings of frustration due to the little support that was given to inservice teachers in the field. She thought this was due to the fallacy that they already have enough experience. They might have completed their training and had some years of working experience like the five participants in this study, but that should not keep them

out of productive professional development sessions designed to promote continual learning and growth.

Often, during professional development periods, teachers are primarily taught in a top-down fashion, what to focus on their classrooms. Some of them almost treated teachers like novices with no skill, knowledge or power of their own to ignite learning. The style the teachers have been subjected to in the past years has not proven to be pedagogically productive. Teachers need to be at the center of their own learning and regularly trained for efficacy. As Maree noted:

We normally do not do enough of discussions in professional development. It is usually a lot of talking, a lot of listening. Someone talking, we just listening, and taking notes. I think many teachers learn best visually through video analysis of instruction so I would like to see a lot more of this.

In her post interview, Marie goes further to underscore the fact that she has experienced a real professional development session, which has activated some professional change in her practice. As conscious as any teacher who loves her job is, she pushes for continuity of the exercise without which would not help the students for long.

...with the experience I have in video analysis of instruction, I believe the exercise is playing a very critical role in my teaching and students' learning. It will be a good thing for a teacher professional developer to follow up on this exercise showing us videos of instruction so we can analyze them, learning from the various techniques the teachers use and also from our discussions in our groups.

Maree went on to explain how she would use the knowledge acquired from the FAVAI professional development to enhance the professional aptitude of her paraprofessionals whom, according to her, are mostly deficient.

I will record a video of some of the things that challenge my paraprofessionals. It could be how to deal with a situation in the classroom or just I do and one of the biggest things I have been thinking about for a long time and I am going to try to do it for next semester with my para-professionals I do have three paraprofessionals in my room that help me out. I have many children that have medical needs in my room, they have all individual plans and sometimes like I said, I can be talking and they will observe me until they are blue in the face without understanding.

She constantly faces this challenge of having to work with paraprofessionals who have too many instructions to grapple with every time. With the avalanche of tasks to complete, they easily forget some.

Maree feels that the FAVAI course has been beneficial to her in several ways.

Apart from just participating and building up her pedagogical knowledge, she also learned that video could be a good training medium. With the challenge of her paraprofessionals in the following academic year, she was going to make an online video of herself putting in the feeding tubes, cleaning the tubes, and adding the food so that her paraprofessionals could go and watch it. Aside from merely observing; however, they would analyze the video and ask questions. Judging from her tone of excitement, she thinks the FAVAI course has provided her assistance for her paraprofessionals. She continues describing her future goals:

[FAVAI] helps with training. I will not just be talking, talking, talking. They will be watching the videos, and analyzing instead of listening to me all day. We do not get to do a lot of that, we do not get a lot of training before the parents come into the room. So I would like to set up scenarios like that where they will have the videos to go back to for references as opposed to asking me what to do all the time because, a lot of time I don't have the time to sit there and talk to them all the time. You know, or show them where they can quickly click on the video on the iPad, watch how it has done, take notes, and I think they will really remember the process much more than if I just tell them. I really do and I think if that is one thing I got out of this class. I just think it's so beneficial to use videos and I'm going to really try to do that for the fall semester for all my paras so we can train them like that.

Jeremiah is a teacher with a lot of experience but who still noted that he had things his long career experience did not teach him. To understand how useful, he thought the exercise was, is to hear what he had taken from it to his classroom—even weeks before the session ended. During the focus group interviews, he said, "I am already doing a lot of things differently." His change of direction in his teaching style was primarily because of the videos of instruction to which he had been introduced. His teaching impacted positively, as he now teaches consciously. Prior to exposure to the videos, he would teach without being mindful of control or the consciousness that the students needed to be taught in a particular way. In one of his classes, he was not happy with himself for not being alert during his teaching in the same way the FAVAI helped him to be.

Depending on the infrequent classroom observations as the tradition has been, seems to be less effective because of distractions commonly encountered in the classroom during the exercise. First, the participants complained that scheduling classroom observations is very difficult due to time constraints. At times, the teacher is not ready to admit observers, and when she or he is ready, the observer may not be available.

Sometimes, teachers who succeeded to schedule observations get too busy helping the classroom teacher and they can miss the objective of the visit. The teachers in the survey expressed the need for FAVAI with unanimity. They believe this is the only medium for them to be free from the problem of classroom distractions, availability, privacy violations or having to deal with insecure teachers.

Wilma thought my decision not to point out a particular thing or aspect of the video was an added advantage to the course, as a result, the teachers remained open-minded throughout the course. She said that I never instructed them on what to look for in a video which was great because they remained in expectation. They keenly watched for pedagogical effects in the videos, and by so doing the teachers observed several aspects that they of the videos that they would not have likely noticed if they were specifically guided in advance.

In the pre-interview, Carine particularly expressed the intricacies of classroom observation:

I think that there is that fear of the unknown...when you think about that exposure having other people see what I am doing and almost violating someone's privacy like going into their room...I think I am nervous about that because of experience.

Viewing a variety of teachers on videos of instruction and having the opportunity to analyze their practice not only provided the platform for teacher learning, but also exposed the teachers to a variety of teaching ideas as well as many concrete opportunities to have thoughtful discussions about various teaching methods. The differences between classroom observation and FAVAI by these inservice teachers was examined at various levels. While classroom observation was noted to have many hurdles like the observer's inability to ask the tough questions required to understand the teaching, FAVAI was said to be more authentic as the panel did not have to hide their feelings about the shortfalls of a lesson for fear of hurting the teacher's morale. It also offered a special forum for teacher to teacher collaboration in a different way from professional development activities. The following dialogue is from the third focus group interviews. This type of back and forth disagreements and agreements is typical of how FAVAI helps teachers to collaboratively develop new knowledge.

**Jeremiah:** I agree the teacher did everything to keep the students attentive, but I will not do any of that sort in my classroom. I do not learn well when regimented that way...but I will appreciate the classroom activeness.

**Angie:** I do not know if it was his first meeting with the students or not...if it was, then he was setting the pace. However, it must not continue in such regimentation...

Carine: Yea, he said it was his first contact with the students in school. I noticed he was using a lot of sarcasm; maybe he was joking about himself and wanting the students to feel at ease.

**Wilma:** I did like the chat he made for students to fill. That facilitated learning and that is what I can try for my kids, but I think it was another case of teacher's excessive control

over the students. People could judge it as another white person dominating colored children he considers incapable of handling their own learning.

Maree: You people are going to think I am crazy. When I listened to that teacher talk, it was as if I should jump into the video and sit in his classroom. I thought it was awesome. I think setting the tone like that is necessary. I have taught at UND, I have taught second grade and now I teach preschool...sometimes you will have to do it that way to set the tone, give the expectations. He really has to set precedence for what he expects of them. I have the feeling that these kids come from the harder part of town or dysfunctional families and have some definite needs so he had to set the tone that way. As time goes on, he will relax and let the kids show their own creativity more and more. When you look at the success rate, you will see that the students did very well and that will cause them to increase their likeness for him. His teaching would not produce such results if it were that bad!

**Jeremiah:** I can see that. You really help me to get a different perspective of teaching at various social and age levels. I only find it difficult because I am comparing it to my own school. My non-colored students would not like to be talked to that way because it seems as if he did not expect much from them at the beginning. However, I can see now that the type of students too matters.

Wilma: I agree he does not disrespect the students... he is capable of changing his attitude with time, but also there are a couple of behavioral things one can do to be able to raise scores over a short term. But I like that he gave the students assigned work at the door as they came in so that there is not time lost. Nevertheless, I hated that the students were made to consume the teacher's thoughts.

Carine: I do not think the teacher was hopeless about the students because he praised them and talked about their quality, which is motivating. There is one thing, overstructuring of the class, but Maree explained from her personal experiences that it needs be done to set the tone especially at the beginning, and that to me gives credit to the teacher.

**Wilma:** Yea, he is very motivating and that is key...There was this thing he would say" you got to R.E.A.D. a Bo-and the students would complete ok. I thought that was cool.

In this scene above, the video that was just viewed was that of a third grade class. The teacher was very orderly and wanted everything to be done a certain way. He directed most of the moves of the children to be regulated. The first four participants saw both the lesson and the method as poor. Their judgment did not consider many aspects of the students and their backgrounds. Maree, who seemingly was waiting to see if anyone would take the same stance as her, rushed in to explain why the teacher did what he did. Before speaking, she said she expected her colleagues to call her crazy but her opinion was too strong to be kept to herself. This illustrates how much safety the participants felt even to express contrary opinions. Such safety and confidence also accounted for the success of the course. According to Maree, the class level, age, culture, race and even financial background of the students matters a great deal in realizing success in a lesson. Most low-income children and dysfunctional families are said to come from a particular part of the cities, especially the inner cities (Canty-Mitchell, 2001; Wang, 1993). This is what she meant by "kids from the harder part of town." Also the cultural and racial background of the students needs to be considered in the planning. To be successful, the first meetings with students should be used to set the pace of the class so the students

understand what is expected of them. According to Maree, without these considerations, the teacher might just be preparing the wrong lesson for the students.

One of the most significant aspects of a professional learning community is the presence of different understandings and critical perspectives, as this is a group in which new knowledge about instruction and content is constructed (Little, 2003). The video analyzed above posed the problem of over regimentation to most of the participants. They thought the teacher was not giving enough room for the students to learn by creating their own understandings. Maree stepped in the conversation to help them understand why such a style by the teacher is necessary. She said regimentation is a way to create an impression in the students about what is expected of them. It served as the focal lens through which the students would perceive the lessons that would be taught to them throughout the course.

The sharing within this learning community scaffolded the teachers to gain some pedagogical insights into motivation. This led to a change of stances when Jeremiah said that Maree really helped him to get a different perspective of teaching and when Carine said that the over-structuring of a class is a problem, but the life experiences of Maree aided her understanding of its rationale. The teacher, even with his regimented style, was also encouraging as he praised his students, telling them he believes in them. Thus via scaffolding, the participants gained knowledge of motivation and giving the students confidence as an integral part of a lesson.

# Theme Two: FAVAI Provided a Suitable Platform for the BVP Inservice Teachers to Understand Classroom Management

The classroom is not only a place where teaching and learning takes place but a place where life changing attitudes are acquired. Such attitudes include the understanding of humanity and human relations, self-esteem and personality development. Classroom management is a technique of coordinating the teachers' activities with those of the learners to maximize learning outcomes and the construction of the human mind (Dreikurs, Crunwald, & Pepper, 1999). With this background, the success of a lesson relies largely on the success of the classroom management style of the teacher. One if the themes that featured prominently on the data from participants was classroom management. This may come as a surprise because many people do not imagine how inservice teachers struggle with the problem of classroom management. The participants saw different management styles exhibited in the videos and during the analysis, many more were discussed. The participants indicated that their management skills were greatly improved by the experience and that the positive impact of viewing and discussing the videos was going to be felt in their various classrooms, especially in the improved learning outcomes of their students. Maree, for example, during the focus group interview, made comments supporting the claim that FAVAI brought a lot of expertise to the inservice teacher.

In the videos, we saw very many different ways of managing the class. I was very impressed by the way teachers of Head Start were able to handle their kids throughout the school day...they employed many different ways to keep them busy and not bored. High school teachers did the same thing but with differing activities according to age. Then during the discussions, colleagues filled some of

the loops that were in some of the management styles we saw. For example, asking high school students to clap their hands and touch their heads seemed inappropriate. I think what made this learning different from classroom observation is that we were not just watching a teacher teaching. We were not just copying what we liked and rejecting what we did not like, as we would do during classroom observation. What we did was that we observed, and then we discussed. This means that someone had to question some management practices to understand how good or not so good they were. At the end, everybody knew why something was done in a particular way and its consequences on the students' learning.

Carine, like her colleagues, believes that she had so many good things to take away from the video of instruction analysis exercise, among which was classroom management. As a special education teacher, classroom management models seemed to be out of reach for her because of too many privacy concerns in the special education sector. In her opinion expressed during the pre-interview, this forum offered an important opportunity to increase her classroom management skills.

I am not always placed in situations where I can learn something about classroom management...I teach special education and this is a very difficult area to teach. It is difficult because there is little or no situations where one can practice how to deal with impromptu situations. Other teachers can find a way to simulate but not us from the special education sector. Even videos on special education have to go through a lot before coming out. This further decreases the few avenues we have to learn how to manage situations in the classroom.

In her final interview, Carine was confident that her expectations were met in a way she was not expecting. "Our video analysis of instruction was great because it helped me to see from videos and also hear the input of some experienced colleagues how the classroom could be managed. I wish we had such training every semester!" Her earlier frustrations regarding the lack of productive and inspirational professional training courses were calmed by the results she had realized by the end of the session.

FAVAI utilized by inservice teachers can have multiple implications for professional development, especially its impact on the learning. However, this is not something that is practiced in numerous teacher professional development seminars or workshops. Jeremiah, in a written document, lamented that their profession quarantines them from seeing and learning from other teachers, but that the video analysis was helpful and can play a big role to close that gap.

Classroom management to me is the logical connection between students, activities and time. In this video exercise, I picked a few of the techniques to keep students alert, focus and motivated to learn. I think that is better than nothing. If I had such opportunities in the past, or if I continue to have such opportunities, I will become a more complete teacher than I am. You have taught me a lot and I am very thankful to you for that.

For Wilma and Agnes, classroom management was not at the top of their priority list of newly acquired knowledge, but they both found this topic to be one of the beneficial outcomes of the study. However, they both expressed the feeling that some of the classes were over-structured for their liking. During the final interviews, Maree responded as follows:

I was learning everything from our class. Some people said some of the video classes were over structured and teacher centered, but I think that is not a problem. I can take something meant for high school students and adapt it to my students and age group. I must not apply what I learn word verbatim.

The following were Agnes's thoughts expressed in her final interview:

Video of instruction should be included, in teacher professional development because as I said before, otherwise we need to go out in the classrooms of other teachers to learn. Actually being in the classroom, which I think it is great, too, but then the fact that a teacher observing in another teacher's class cannot just be frank and truthful makes learning difficult. That you cannot genuinely express your feelings about a lesson, say roll your eyes over an awful situation or occurrence in the class...you cannot be yourself when you are right there in the classroom with a fellow colleague. You have to try to be nice over anything that happens. Kind of try and pretend to be neutral and just pay attention to the teacher but with video analysis, one can react sincerely to circumstances attitudes that call for such sensation. One can comment about something, laugh, appreciate or castigate without fear of hurting one's feelings. This is what one cannot do while observing a class in real time.

In this section, Agnes believes that the difference between classroom observation and facilitated video analysis of instruction is as clear as day and night. With the former, the observer is very restricted both in words and actions while with the latter, the observer is very free to appreciate the lesson as wished. This is why facilitated video analysis of

instruction works. It brings into learning, the liberty of expression which is a good ingredient of learning community and social constructivism.

### Theme Three: FAVAI Initiated and Sustained Teacher Reflection among these Inservice Teachers

Teacher reflection is fundamental for teacher professional development at all levels (Brass, & Coles, 2014). It is only when teachers collaboratively engage in reflecting on their teaching that they can be able to surmount the challenges of effective teaching but to achieve this, they need to have time available to do it. The theme that almost all the participants agreed upon in their anonymous survey responses was teacher reflection. During the study, the participants said that they had the time to reflect on their practice in a way they have not been doing. The prompts created for the group discussions assisted in encouraging participants to deeply reflect on their practice.

In Jeremiah's written documents, he expressed his feelings, which only emphasized how much he was learning from the video analysis.

When I was teaching yesterday, I imagined the cameras and what people would be taking away from watching me. Could they see what my point was? In addition, I was not happy with myself then because I did not write some place, where they could see why we are doing what we are doing today. I did not stop at the time I was planning to stop. We were talking about railroads. I tried to explain how railroads work but I was sidetracked talking about riverboats. The riverboat era in our region was replaced by railroads and I started talking about riverboats, which was not the lesson. I could have stopped there and I thought, what if there were teachers watching me? They would ask each other where he is going to with the lesson? Why is he talking about this? ... I've already changed a lot... I will be

more willing to spend real time on watching other teachers and analyzing their teaching.

This critical stance reflection of Jeremiah occurred with the help of the FAVAI exercises. The participants showed a lot of excitement to renew their skills by providing them the appropriate means. Carine's take from the exercise about teacher reflection was straightforward. The FAVAI experience helped her to seek answers to questions she did not think of before. She was stimulated in a metacognitive way to ask herself those questions that would make her a better teacher.

I think that just watching videos of instruction is not enough. The questions you ask us after we have viewed the clips and the interview questions also turn us on. As I watch other teachers teaching their students, I begin to compare myself to the teacher. His actions and the students' reactions cause me to ask myself questions like "Why is she/he better than me? Why is s/he doing the things he is doing when I would have done it otherwise? Does it mean s/he is better trained than I am? Can I be better than him, and what can I do to be better than she is?" I could not have asked those questions if I did not watch and analyze the video of instruction. This means that what I watch, what is said or done in the lesson and what we say during the analysis session energize my reflection. If this is compared with what we usually experience during our professional development weeks where we are mostly lectured, you will see that it is more preferable to do video analysis than what we are used to doing.

To Wilma, video analysis by inservice teachers can cause deeper reflection and new understandings on effective teaching and learning strategies as the key to improving student performance. The reflective teacher is a great teacher, according to Wilma. This is because reflection births new strategies of solving the difficult equations of teaching. In her written documents, she declared that:

The videos were great and we had time to think out of the box. Personally, the video analysis of instruction exercise made me to reflect on my practice and I know everybody reflected on his or her practice in the same way as I did. I have to think and ask myself "why am I doing what I do and how does it affect my students and other learners? How does what I do prepare my students for the present, the future and their understanding of life in general?" This is a very important component of teaching but most of the time, we, as teachers do not find time or the right place to reflect both individually and collectively. I do not think we had enough foundations on teacher reflection. However, I feel enriched by this course because something that I am not used to doing, I was able to do.

Agnes felt that the rare opportunity of having to mirror her teaching for correcting came via the video analysis exercise. She is able to reflect and understand how her students learn. One of the causes of inertia to resist change among inservice teachers is the absence of reflection or the possibility to reflect alongside other teachers. When a teacher cannot reason together with others, when teachers cannot measure their skills with others, when teachers are made to teach in isolation where they cannot see or hear what other teachers think and how they react to classroom situations, they start to lose the motivation they need to thrive in their profession. Agnes approves of the FAVAI with relief and satisfaction in her final interview stating:

Good to know that I can have a forum where my practice is put under a lens and scrutinized by others and by me. I was impressed by the sessions of discussions we had because they gave me the opportunity to learn a lot from the reflections of my colleagues and this helped me to reflect on my own instruction too. My participation in this course has had unforgettable impact on my teaching. It has given me the rare opportunity to think of the result of all my plans before I ever execute them. I find it necessary to have an idea, an impression or some thoughts about what I am going to achieve by teaching a particular topic in a particular manner. I discovered that all of what we say in class matters and the students are listening and learning with every word we use. This makes it more imperative to think before teaching, to have a full understanding of the consequences of every word mentioned in class, and this can only be achieved by reflecting.

Jeremiah shared a similar impression with his fellow colleagues in the study. Inservice attendees, to him, would be disappointed if they just sat and watched a video without the discussion part of it. He had a very strong point to make because this study was not designed as an interventional study where the participants would imitate the instruction modeled by virtual teachers. The study was purposefully intended to have teachers view videos of instruction of other teachers to analyze them among themselves. Their learning was not expected to come from just watching the videos but from the open discussions and exchanges that took place after each video.

In the pre-interview, Jeremiah could not wait to express his expectations.

We need time to watch and discuss or analyze videos of instruction to learn from them. One of the things one cannot escape from learning in videos is reflecting.

Once you get to watching video, you are bound to start to reflect even within yourself before the time for plenary discussions come. Discussions come naturally while we watched videos because, when I see another teacher in classroom teaching, I begin to ask myself "why is it that you are...for example the teachers that are a little bit more deliberate in expectations and ask people to take out their papers and lay them out exactly this way then pick your pencil and do this...that the things that are not ...what I will do is I would like to learn why they are doing it from their perspective. I will ask, "Do you know that you took more than 20 minutes to get this done when I could have done it in four? Why is your method is better than mine? It is not a criticism, it is more a reflection, a self-reflection and when we start to analyze, I ask colleagues why he or she did what they did. ...tell me, teach me. I would like to do that; I would like to ask some teachers about how they measure student growth. Is it always on how well they learn the material or is it on how they change their study skills or their methodology for learning? What is the way that you measure how well somebody is learning his or her science for example? Is it the state test, is it some test that the teachers are giving, or is it the students' ability to explain it in their own words? What is the advantage of allowing the students to interact with each other more? These are all questions that come up to spur my sense of reflection. The video grants me an excellent platform to think in this manner.

Reflection is the heart of every good teaching, as Jeremiah seems to be suggesting here. Inability to regularly observe other teachers is the subject of his frustrations, because seeing them motivates reflection. He laments about the necessity for every conscious teacher to be able to observe other teachers in their classrooms.

### Theme Four: FAVAI Provides an Environment for Mutual Learning that Exceeds what Teachers Found Individually

All the participants unanimously agreed in the anonymous individual surveys, focus group interviews, and post interviews that mutual learning was a major outcome of FAVAI for inservice teacher professional development. The richness of the group in diversity was a rare added advantage to the teachers' professional development. The teachers not only came from different schools but also taught different subjects at different age levels, which made it possible for them to be able to learn what happens in different subject areas and at various age levels. During the pre-interviews, they were still being introduced to FAVAI for teacher professional development so they had no decided stances yet. Mutual learning is very important in teaching and learning because a teacher needs to embrace lifelong learning. Although an individual could decide to become a lifelong learner by himself or herself, when two or more learners come together as a community, the process is aided by the social interactions. Respondents suggested that when inservice teachers come together to view and analyze videos of instruction, they gained from one another in several ways. The videos provided a platform for discussions that helped to strengthen newly acquired teaching ideas. These discussions also enabled inservice teachers to revise their teaching methods, dropping some aspects of their instruction while taking up some new methods of instruction. Just listening to colleagues analyze a video was very important to their own professional development because it compelled them to learn new ways of teaching to consequently revise their previous methods of instruction. The fact that different teachers came from different schools,

different grade levels and varying subject areas with new styles and teaching philosophies made the forum a dynamic one where interactions of pedagogy and exchange occurred. Wilma noted about the mutuality aspect of FAVAI by inservice teachers in the focus group interviews that:

One of the most unexpected things that I noticed during our video analysis course is that as we kept discussing day after day, we began to bond with each other unknowingly. This coming together gave us the confidence to release ourselves to each other. The sharing of learning and understanding became more and more natural so that no one was willing to withhold something from another person. The discussion of those videos of instruction breaks down the barriers between teachers so that they come together to rather define this collaborative idea of good instruction.

The important role of FAVAI in inservice teacher professional development was also captured in the description of Jeremiah. He validated the coming together of teachers from diverse backgrounds, which included different schools, grade levels, and subject areas. These were important resources for learning in the focus group interview. Jeremiah commented that "Everybody sees things differently, so I think it is more valuable to do it as a diverse group, I think I would be more narrowly focused...in a group discussion, I can see other people's perspectives on the very same thing." In his post interviews, he reiterated the fact that learning is better done as a group exercise than as a single and individualistic activity.

As we are constantly thinking and devising new ways of tackling some situations in the classroom, it is important to share our thoughts. When we share, we are

able to know if what we are doing is good or not for the kids. For example, if I say I ask my students to stand in lines before submitting their journals, someone in the discussion might say it is time consuming and they may propose something else, which I may buy. Learning is about buying and selling. You buy new ideas from others and sell your own ideas to them. If your ideas are good, they will be bought. This is how we learn and if we do not have exercises like this where we sit and analyze teaching, it will be just a dream that will never come true.

#### In the midcourse survey, Carine felt that:

It was very interesting to hear other peers' thoughts and how much they took from all of the structure that was used in the videos. I learned from them that different children at different ages need different amounts of structure and, amounts of direction, and then, I wouldn't even consider that if I had not collaborated with them. This comments clearly suggests that she learned a lot from the reciprocal interactions that occurred in the learning community created by the research.

#### Maree said in her written document that:

I really do think it is more profitable to analyze the videos with others because you gain their perspective on things, you know I might not have seen or picked out something in the videos that we watched unless they said it then I went back and said "O yeah that is right." You know that sharing and your questioning has really, really helped me, to analyze those videos working together to see what I thought was good or bad or things you can change. As seen from this declaration, Maree benefited enormously from the course. Her use of words and expressions like "gaining the perspectives of others", "sharing really helped" and analyze

those videos working together are credible testimonies that mutual learning occurred.

Jeremiah concluded by stating that FAVAI can be very useful, especially if the focus of the discussions is the lesson and nothing but the lesson. "Feedback from other teachers might help us to be better teachers." These thoughts show how valuable inservice teachers consider FAVAI for their professional development. Learning from colleagues through classroom observations has been the most widely available professional development option to inspire teachers to learn more and new skills of teaching. Agnes sees a sharp weakness in this by commenting, "On video, teachers can pause and review things that worked well, or troubleshoot ideas for improvement. While scheduling real-time observations of a colleague can be very difficult; FAVAI is more time-convenient." Jeremiah corroborated this belief by saying that there is not enough time for teachers to observe their colleagues teaching.

Agnes added that even when there is time, scheduling is very difficult and this ties in with what Jeremiah's privacy concerns and potential intimidation of insecure teachers. The necessity to include video analysis of instruction in the curriculum of inservice teachers cannot be over stated because it provides an authentic forum for teacher learning. Most teachers and school administrators have hardly taught these factors in classroom observation. Video analysis of instruction gave teachers an authentic setting to observe and make authentic critiques without having to offend or hurt the morale of the teacher observed.

With these tendencies from data, it gets clearer that FAVAI by inservice teachers has a real potential to solve problems of teacher growth and promote mutual learning by inservice teachers.

### Theme Five: FAVAI had a Powerful Impact on the Teachers' Analysis of Teaching

To understand the power of FAVAI, one needs to look at the concept of negative learning which I coined to refer to as a situation where learners are misled to learn the contrary of the intended lesson. For example, one could let teachers watch a video of a teacher who does not give his students room to think for themselves because he just wants to tell them what they need to know to save time. The intent of the video is to let the teachers see how bad such a decision could be to the students' academic growth, but some teachers who did not know that they could manipulate the students to save time might learn that negative lesson. The inexperienced teacher might watch a video of instruction with a negative lesson and think it is beneficial, but in reality, it is far from helpful.

Initially, one might assume that all video of instruction should have a lesson to teach but, while the good ones did teach different and efficient pedagogy, the bad ones served a purpose as well, by create a good context for participants to discuss. However, participants' expectations in this area were proven contradictory judging from the data. Participants feared that viewing videos with poor instruction could lead to negative learning. Nonetheless, in such a circumstance, the impact of analysis becomes more powerful. Videos of instruction are not simply video modeling and should not be considered as such. Without guided facilitation, a video could be confusing and even distracting in case it is incorrectly assumed to serve as an online teaching method of best

practice. The following is a summary of Wilma's fears that she expressed in her final interview. This calls for the need for caution in using videos of instruction. Like her fellow participants, Wilma strongly believed that the experience was great, but still feels that there were some aspects of it that could be negative to the novice teacher.

I do not want to say our course was not helpful. The course was great. No one can say they had nothing to take back into their classrooms. I just want to say that in spite of the good collegiality that came because of the video analysis, the opportunity to reflect with others and so on; video of instruction could also serve as a forum to learn bad teaching from bad teachers in the videos. I can say to be honest with you; I saw more bad teaching than what I expected. However, the teacher support came from the analysis component. Some of the teaching in the videos could easily mislead a teacher who is not really grounded in teaching. Look at the highly structured teaching and the teacher-centered stuff! Only contributions from colleagues would help us from copying poor teaching.

In spite of the weaknesses of video as a modeling instrument, the participants remained appreciative that they had learned a new way of analyzing their teaching although Jeremiah shared opposite concerns to the others. Video analysis, he noted, could have a negative effect on the novice teacher or even the inservice teacher who is not grounded in a teaching philosophy. One of the ways this could occur is when the lesson is not the focus. During video analysis, some teachers could misfire. Instead of concentrating on what they should look out for, the teacher participants might focus on petty talking like admiring the manner in which the classrooms are in, and comparing them with theirs. Even dressing of the virtual teacher may distract some teachers. "Video

analysis has the potential to bring damaging habits to light as well as highlight effective instruction being practiced." Said Jeremiah.

Video of instruction can be misleading, if the viewing teachers were to copy the "damaging habits" of teachers in the video. Normally it is said that one should not teach using damaging or negative content for that might paradoxically be what learners take home instead or the intended lesson. "I think if the videos are not well selected, and I know it could be a very difficult thing to do; the exercise will be a waste of time. Teachers will come back learning what they should not learn," said Jeremiah.

Carine, in her final focus group interview, personally thought the video analysis experiences were terrific but that using the videos in isolation would not be very helpful. This underscores the fact that to render the professional develop successful, it should not be used like an interventional tool or video modeling exercise. Instead, it should be a thoughtfully facilitated video analysis of instruction experience because the learning and exchange come primarily from the discussions. Carine stated:

I learned a lot from the video analysis but sometimes I did not know what to take from the videos. Some teachers were doing a rigmarole most of the time and I wondered what they were doing. Some things that we already know were taught in a way I could not understand and if they were new topics, I would be thrown under the bus. Therefore, video is good to learn from through discussions, but it can also feature a very bad teacher or role model if one is not attentive to the discussions.

# Theme Six: FAVAI had Consequential Impacts on the Inservice Teachers' Professional Development as Well as their Students

Participants' responses also evolved around the theme of consequential impact in the same way it centers on the themes of scaffolding experiences and mutual learning. Participants observed in the confidential individual surveys, written documents, and post interviews that the FAVAI exercise had some significant effects. Consequential impact is a theme that linked the data to the learners, i.e. the students. How FAVAI by inservice teachers may influence students' learning outcomes is important because the main aim of invigorating teachers' pedagogic expertise is not only to enable them improve on their instruction but most importantly, to ensure that the learning outcomes of their students are also improved. This is particularly significant because teachers need to understand that until their students are successful, they are not effective teachers. Thus, teachers' professional development is not the end goal but, rather, the end goal is their students' learning outcomes. The participants themselves stated that students learning outcome are likely to improve if the teacher is better trained. Agnes' impression about the role of teacher reflection ignited by FAVAI on the students learning is that better teachers make better learners. After insinuating how over-crowded the teachers table is, in her post interview, Agnes finally hopes that FAVAI is a method for excellent teacher professional development.

I think that when teachers are teaching and they are focused on the curriculum and trying to get across managing the time and the classroom, there are plenty of things that teachers can't see at any given time and any given place in the room. So video analysis would give an idea of what is going on that they are not aware of and how to be more aware of and then address them. When teachers get better

equipped for work, the students are more likely than not to be high achievers. It is like a pencil, when a pencil is well sharpened, the handwriting is likely to be clearer than a blunt pencil even if the pupil did not have good calligraphy skills.

FAVAI by inservice teachers greatly increased the teaching spectrum of the teacher because classroom aspects that could be hard to notice can be noticed on video and discussed. How this is useful to the learners is very clear. The participants developed more efficient methods of classroom management, time management, and instruction. Following their participation in the study, when I visited some of the teachers in their classrooms and they commented that: "...things were not like this before. Borrowing from our FAVAI class, I have changed a lot in my class. For example, these tables were not here before and my students did not sit this way." Another said, "...I am already doing a lot of things differently now than before..."

Jeremiah noted that the improvement of the teaching methods also makes teaching more enjoyable to the teacher and students alike. This philosophy aligns with the thoughts of Pekrun Elliot, & Maier (2009) who found that students' learning outcomes improved significantly each time they enjoyed the lesson. In her written document, Wilma conferred, reflecting that:

FAVAI for inservice teachers would improve student learning outcomes because teachers would have had the opportunity to think deeply on various teaching strategies, whether they are effective or not and why. FAVAI for inservice teachers also helps teachers develop a common understanding of effectiveness. ...teachers in the office over lunchtime would gather over a problem. A math problem, for example, and gain insight into that problem by discussing it with

each other. Now in the work that I do, I value collaboration extremely, because I have found that in training adults in particular it is nice to have the perspective of all of my colleagues and even when I may be the facilitator of the professional development the chance to discuss deeply certain ideas means I have learned from the teachers I am training also. Moreover, learning is always in both ways- I learn from others and they learn from me.

FAVAI for inservice teachers has significant impact on the academic scene.

Firstly, teachers become better practitioners of their profession. They become more and more aware of classroom occurrences because they are better able to notice the challenges of their students and to be able to scaffold their learning. According to van Es, & Sherin, (2008), FAVAI has the potential to help the teacher as well as the students.

With the teacher, the professional development experience can enable them to pay attention where it is most needed i.e. the students' areas of difficulty. The ripple effect of this professional awareness is that students will likely improve in their learning outcomes than without FAVAI.

This scene presents a dialogue in which the participants sought to figure out the consequential impacts of sharing in learning community within the group. The video clip exposes the students and their teacher struggling to define character traits in a literature lesson. What is curious about it is that the students took 30 minutes to write a single sentence. I used that instance to find out if the participants could make sense of what was going on. In the course of the conversation, some lessons emerged to impact the teachers and consequently affect the learning of students. The principal lesson is that teachers need to be supportive of the learners and that slow learners should not be left out of the

learning train. To better understand this dialogue, readers are advised to be keen to the teachers' strategy for motivating all the students to learn. However, there is this question of heroism, which participants think needs be handled with care because of its negative impact on the minds of children.

**PI:** Does anyone of you have the impression the students IQ level is generally below average?

**Wilma:** Where did you notice that? I did not see anything like that.

**Jeremiah:** Low IQ? Maybe because the students did not want to volunteer to read to the class? I think so judging from that scene. High achieving students are always eager to do something to satisfy their curiosity.

**PI:** So why do you think it took about 30 minutes for any of the kids to be able to write one sentence during the lesson?

**Agnes:** I got it! It is good to be observant and to reflect as you go. The students took up to 30 minutes to write one sentence in a first grade! They must be some serious deficiencies in the class.

Carine: I do not think it is necessarily a problem of intelligence but...it could also take that long because everybody has to move at the same pace even though they do not have the same pace. Nobody was to be allowed to move on until everyone was at the same level.

**PI:** Yeah that is where I saw the exceptionalism of the students. That is where I saw that they were not as bright as ordinary students.

**Wilma:** Oh yeah right, yeah right. But if they were that low in IQ, why did the teacher not walk them through the lesson or exercise?

**Agnes:** Maybe they were not in need of such guidance because he said the day before they had brainstormed the character traits of Jonah and Usher. I really wish they had been on the board or somewhere available for the students to see. He told the students to feel free to work on their own but if they are stuck, they could seek help "here."

**Carine:** At one point did he not say, "You can look at your notes or something?"

**Jeremiah:** See what you do to help the students, let them start by analyzing their own character traits first before going into the story and not moving from the story to themselves. I do not understand why he did not go backward with their traits.

**Agnes:** Maybe he was doing so because they are not allowed to be individuals and that maybe is one of the things they were trying to pull out but I did not...

Wilma: And a boy did say that Jonah was brave because he stole an apple

You know there is a lot in there about stealing and bravery in our society. To steal
should not so much be an act of braveness in our society.

PI: Isn't it correct to characterize someone a hero for stealing in a heroic fashion?

Wilma: It depends on the age group but by every standard, stealing is a vice and should not be painted to seem attractive.

Carine: Yes, of course. I would tell my students that a vice cannot be rewarded so a thief is evil and should be characterized as dangerous, wicked, harmful or damaging.

**PI:** That is why students need to be guided some of the time until they are able to navigate in the right direction on their own. What do you think the teacher might have missed here?

**Jeremiah:** To me, as I said before, he did not give the students enough support from the onset. He should have started from familiar to unfamiliar not the other way round. Why

did he not ask the students to find character traits of their peers or even of themselves first before trying to do it with the book characters?

**Agnes:** I can see what you are saying...beginning from simple to complex and not like he did. I buy into that idea. In addition, even wanting the students to go at the same pace is not tactful. Smarter students will be bored.

**Wilma:** That is where differentiate instruction comes in. He needed to be able to fashion a method to meet up with the needs of every child at their pace, I think. Like that, smarter students are challenged while less smart ones are not pressured to give up.

**Carine:** I really agree. I agree. That is a good way of doing it.

This dialogue falls in line with the theme "consequential impact" of facilitated video analysis of instruction. Active learning shows that a group together knows more than individuals do. However, they may all need some support and then as they go along, proficiency is built in the group itself over time, and the scaffolding gradually becomes the responsibility of the group.

We experience the impact or consequences of learning in a collaborative group in this dialogue when a conversation helps the teacher to detect students' learning and reasoning techniques practically. The teachers did not all notice that a student labeled a thief as a hero. But because of the consequential impact of the professional learning community, some of the teachers were quick to notice the challenge in teaching from unfamiliar to familiar. Characterization can easily be misleading if not handled with intelligence and creativity. The teacher did not apply scaffolding to the lesson so went straight to asking the students to levy character traits on personae in a novel. Instead, they

should have started by characterizing people they were familiar with before delving into the book.

The question arising is how to avert situations in which students might learn what is not the intended lesson in their different classrooms, if they occur. Carine suggested helping the students to understand that characters who inflict pain on others should be described as such. This was a good way of not letting the students to experience negative teaching from either the play or their teacher. Besides, the notion of differentiated instruction ensued. Rather than want students to move at the same speed in a class of diverse learners, it became clear that the teacher could give them differentiated instruction where they go at their speed. These discussions, sharing, and teacher changes are all evidences of the consequential impact of video analysis of instruction on inservice teacher professional development.

#### Conclusion

In this chapter, I have described all the participants that took part in this study, their demographics as well as professional status were clearly provided as well. I also specified the systematic process by which data was analyzed was specified. Furthermore, I have presented the main themes that emerged from the data, which were namely: scaffolding experience, classroom management, teacher reflection, mutual learning, power of analysis, and consequential impact.

Data analysis suggested that this group of inservice teachers considered FAVAI a valuable tool crucial for teacher professional development. The data also suggested that inservice teachers have several challenges to surmount in the exercise of their demanding daily duties, and FAVAI can help them through the challenges.

#### **Summary and Conclusion on Themes**

In chapter IV, I presented a description of participants and the context of the research. I also provided a description of the main themes that emerged after data were analyzed. Among the themes are those that expressed key aspects of inservice teacher perceptions of video analysis of instruction on teacher professional development. These aspects encompassed:

Scaffolding experience:

- FAVAI provided scaffolding for the teachers' pedagogical knowledge.

Classroom management:

- FAVAI provided a suitable platform for the inservice teachers to understand Classroom management issues.

Teacher reflecting:

- FAVAI initiated and sustained Teacher reflection among the inservice teachers.

Mutual learning:

- FAVAI provided and environment for mutual learning that exceeds what the teachers found individually.

Power of analysis:

- FAVAI had a powerful Impact on the teachers' teaching and learning methods.

Consequential impact:

- FAVAI had Consequential impact on their teaching and learning.

I then discussed how the data substantiated the themes. Furthermore, the analysis of video of instruction offered the teacher participants a meaningful platform on which to exchange their viewpoints. It also opened them up for more reflection and learning from

each other. This reflection made it possible for them to identify the negative aspects of video, that without contextual group analysis, video is not the remedy of professional development challenges. The participants who earlier considered some classes to be too structured were helped through the analysis to understand that the age and class of the students warranted such structuring. The power of group discussions and analysis was experienced in such circumstances.

The video provided the setting and opportunity for learning, and given that getting a substitute for the video is difficult because the other options would be classroom observations with the challenges already conveyed in this study. In addition, to think that a focus group can sit to discuss an imaginary lesson or one remembered from an observation is doubtful. Video had its own part to play. The moving and speaking mirror peeks into another teacher's classroom!

We cannot leave out the role of facilitation, which became the cardinal point of the study. Proper facilitation that prompts the participants where need be is necessary while poor facilitation could be detrimental to the success of this study. The question on student IQ, for example, brought out several pedagogic skills that might have been left out if the facilitator was not vigilant enough to ask. Another example of good facilitation is seen in the question on what the teacher might have missed. This brought about the lesson on differentiated instruction, which was appreciated by participants. Participants said and heard uncommon ideas they rarely were given the opportunity to discuss before. The positive indicators were that the teachers accepted and enjoyed learning via FAVAI and were recommending it on a regular basis.

In chapter V, I will present and discuss three assertions that stemmed from data analysis. In addition, I will present the implications of these assertions for inservice teacher professional development, limitations of this study and recommendations for further research on this topic. Lastly, I will state the contributions of this study to existent literature.

#### **CHAPTER VI**

#### **DISCUSSION**

The purpose of this study was to investigate inservice teachers' perceptions of the impact video analysis of instruction had on their professional development, teacher dialogue, and other related outcomes. The research questions that guided this study were:

1. How would facilitated video analysis of instruction by inservice teachers enrolled in

- 2. a) How might this professional development influence their learning community?
- b) What might be the possible lasting outcomes of this experience?

the BVP course, impact their professional development?

The theoretical framework driving this study was Vygotsky's constructivist theory of constructing knowledge from the environment and lived experiences. Data analysis followed procedures recommended by Caudle, (2004) and Miles & Huberman, (1994).

After data analysis, a number of themes emerged providing a summary of inservice teacher perceptions of video analysis of instruction on their professional development, its impact on the students, and the counter effects of video on the teacher, if interactive analyses are left out of the activity. For the purpose of clarity, the themes have naturally fallen into two categories. Teacher impacts and impacts on other school stakeholders. The teacher participants strongly suggested that the video analysis experience could be very helpful for teachers as it created a forum for them to interactively create their own knowledge, learn from one another, and become practitioners that are more reflective. A possible impact of the professional development

experience would mean improved learning among the participating teachers. As respondents suggested, good teachers make good teaching and good teaching makes good learning (Wentzel, 2002; Haycock, 1998). Talking about teaching and learning through video is the fact that some video was noted and will always be seen as teaching the wrong pedagogy either by being too structured or teacher centered. This was one of the things that participants isolated as a way by which teachers could be influenced to be too powerful in class, thereby toiling with learning and the students' academics.

In this chapter, I restated the purpose of this study and a review of the methodology and results. Next, a presentation of the results and their relationship to the research questions is provided. Recommendations and implications are included for educational researchers, professionals, and stakeholders who administer professional development programs for teachers. Research limitations and recommendations for future research are also included.

### **Background and Purpose of Study**

As far back as the 1960s, videos of instruction of experienced teachers have been used to improve upon teaching and learning (Kurtz, Batarelo, & Middleton, 2009; Kurtz, & Batarelo, 2010). Because these recorded videos of instruction have the distinctive potential to capture the richness and complexities of classroom practices, videos of instruction have increasingly become critical lenses for examining practice effectiveness in teacher education (Brophy, 2004). Some cultural traditions uncovered with the use of videos of instruction can both be appreciated and expanded or replaced if need be (Santagata et al., 2007). On the other hand, effective teacher professional development must provide numerous opportunities for teachers to observe, analyze, and classroom

practice (Darling-Hammond & Sykes, 1999; Garet, Porter, Desimone, Birman, & Yoon, 2001; Santagata et al., 2007; Barlow, McCrory, & Blessing, 2013). One educational adage says 'He who stops learning must stop teaching.' This is one context of this study – seeking possible ways by which inservice teachers could be inspired to learn and remain lifelong learners.

The University of Michigan is a typical example of an institution that uses video of instruction for teacher professional development. Preservice teachers carry mobile video cameras each day to record their teaching which they discuss at the end of the lesson. This method of teacher assessment of teaching cannot work with inservice teachers judging from their frequent complaints about too much work and lack of time. This is why my approach is good and can become a model because, rather than having each teacher discuss their individual teaching, a group of teachers could all sit together and discuss a neutral lesson and have the same professional development benefits with less time spent. The use of video of instruction during teacher professional development drill will give the teachers a unique opportunity to share their skills and understandings as well as construct a firm learning community. Brunvand, and Fishman, (2006) of this University elaborate on the value of videos of instruction in the professional development of teachers.

The purpose of this study was to investigate inservice teachers' perceptions about the possible contribution and value of Facilitated analysis of Video of Instruction (FAVAI) to their professional development. The study participants noted that challenges that they face in enriching their professional development, include surmounting the problems of isolation among inservice teachers, the time constrains and difficulties

encountered when setting up classroom observations, and creating a forum through which to talk and listen to each other. This study seeks to report what role the teachers think video analysis of instruction can play in addressing these challenges.

### **Assertions of Findings and Discussion**

This study was grounded in constructivism as a theoretical framework and the assumptions of social constructivism. Results from the data suggest an alignment of the perceptions teachers have about facilitated video analysis of instruction with the assumptions social constructivism have about learning (Powell, & Kalina, 2009). Data analysis generated three assertions from this study.

# Assertion One: FAVAI by the Inservice Teacher Participants Provided a Scaffolding Experience to Enhance Learning

Analysis of data suggests that the mutual learning and the scaffolding experience provided by FAVAI could offer inservice teachers a unique opportunity to gain professional support from each other. The lifelong learning teacher (Darling-Hammond, & Bransford, 2007) is one who has the openness and possibilities of continually learning from others. Bringing inservice teachers together in a community of learning also offers them the opportunity of creating knowledge from the experiences, thereby making new realities. This ties in with the learning assumption of social constructivism, which posits that learning is a social process with meaningful learning occurring only when individuals engage in social activities (McMahon, 1997; Berk, 2009).

During each phase of data collection, all of the participants stated that their coming together to analyze videos of instruction was a rare and valuable opportunity, which enabled them to see the teaching of other teachers as well as voice their concerns about certain aspects of the teaching in a way that is difficult and therefore seldom done

during classroom observations (Marsh, Mitchell, & Adamczyk, 2010). During their interactions, the teacher participants were able to hear and learn from each other and that impacted their instruction, as many of them started applying new ideas from the exercise to their classroom instruction even before the study was over. Seeing the significance and urgency with which participants of this study applied their learning experiences from the FAVAI exercise to their classrooms strongly indicates that implementing FAVAI to help revitalize inservice teachers' professional development cannot be over emphasized. Three of the participants reported to have started applying some of the knowledge they acquired from the study even before the research was halfway completed. They acquired basic knowledge from the videos because video can capture richer details in teaching and learning and significantly enhance peer sharing and discussions (Lee, Ginsburg, & Preston, (2009). When the details of teaching and learning are brought to the limelight, it becomes possible for teachers to discuss the strengths as well as the weaknesses of the lesson. This usually is a fertile platform for sharing and learning. In responding to what her perceptions of the activities were, Wilma, in the post-viewing interview said that:

As we continued our discussions, our thoughts became more and more constructed towards better instruction. Listening to one another is crucial and that is where this course excelled. We expressed our ideas, doubts, worries and ignorance without any discomfort.

Other participants to assert that FAVAI was very transformative to the professional development of the teacher participants echoed her strong opinion. This solidified the strengths of the assertion that FAVAI by inservice teachers is scaffolding and enhances mutual learning. Every participant attested to the usefulness of the exercise to inservice

teacher professional development. In fact, some of the teachers started applying their newfound knowledge as soon as they got a hold of it. Agnes, for example said that she was using video to record herself teaching some of the time, "I am already using video a lot. I take it to my class and ask a student to video me while I teach so video of instruction is not new to me." By this, she was suggesting that the FAVAI was not going to add much to what she was already doing. However, by the end of the course, her post video analysis interview responses significantly expanded upon her earlier perceptions.

I was doing just a little part of what ought to be done. My own video recordings were just like watching my teaching in a mirror with no one to criticize, comment or analyze it with me. What we did in the course was phenomenal! There were different voices, different perspectives and different experiences, which all made the difference. The rich discussions ignited by your prompts dug out a lot of information from all of us and then, I could see what my individual viewing did not show me.

She was not saying that what she did by videotaping herself was not useful, but that she was doing just a part of what she was supposed to do. This missing link in what she was doing is the application of the constructivist assertion of learning as a social activity in the case, by way of the video analysis. Prior to her participation in the study, she was omitting the social aspect from the activity and that is likely why she was not as successful as she could have been. However, when she took the FAVAI course, the social interactive environment made the difference and that is why she learned many lessons, due in part to the discussions and contributions of other group members.

In the midcourse anonymous survey, all five participants stated that FAVAI for inservice teachers merited a place on their professional development curriculum because of the efficiency it brings to stimulate their proficiency in teaching. Jeremiah also captured the importance of FAVAI to his personal professional growth, "Viewing the videos and discussing them in a group is very rich in the diversity of perspectives it provides. Everybody sees things differently so I think it is more valuable to the teacher to watch and analyze videos in a group." This further aligns with the social constructivist assumption of learning as a social activity (Ernest, 1999; Denton, 2012; Powell, & Kalina, 2009). Video analysis of instruction provides access to classrooms and teachers engaging in lessons that are for more convenient to diverse learners and teachers in a variety of contexts than live observation (Xiong, 2013).

Carine and Maree also agreed that FAVAI adds a special ingredient to their professional development. In her written documents, Carine said, "the exercise has the potential of rendering teachers better professionals than they would have been without it. I will like to see more, if possible". Her opinion became contrary to her previous lukewarm attitude about videos of instruction she expressed during the pre-viewing interview when she was doubtful of the importance of video analysis of instruction to her given that she is unique from the others as a special education teacher. In addition, she had not been used to utilizing video for learning teaching skills even when she was doing her preservice training. "In college I don't even remember viewing a video of instruction for a class."

# Assertion Two: Teacher Reflections during FAVAI Intuitively Yielded New Knowledge

The coming together of teachers to view and analyze videos of instruction has the potential to generate new knowledge from experiences in their classrooms because they are able to reflect on their practice (Yerrick, Ross, & Molebash, 2005). Reflection is a very important, but often neglected component of learning and creating knowledge. Generally, incorporating reflection in teaching and learning has been problematic because reflection is not always associated with working as a teacher. To many, teaching is often considered as something that deals with the moment at hand, the immediate present and direct pragmatic action, while reflecting is comprehended as more of an academic quest (Huinker, & Freckmann, 2004; Schön, 1991). This study brought a new perspective to how the practice of reflection in education can be henceforth perceived as conducive to teachers' development and learning.

The responses of participants also confirmed and aligned with the second assumption of the constructivist theory—that knowledge is a social construct. This assumption claims that knowledge is not discovered but created in a social context, similar to the group discussions that took place during the FAVAI, (Prawat & Floden, 1994). To substantiate this assertion, Maree, in her written documents stated that she was going to use the FAVAI knowledge she has to create some new knowledge for her paraprofessionals, who have a lot to learn to be effective in executing their duties. "I am adapting new things from our course into my classroom. First, I now know that the best way to learn is by analyzing videos, so this will help me solve the problem of my paraprofessionals."

Maree's struggles in the teaching field have been very frustrating as she has paraprofessionals who are not trained to help her. After taking the FAVAI, she gave details of ways by which she would create a video of her classroom routines and upload it online for her paraprofessionals to watch and analyze so as to provide them with the aptitude and awareness to help her where help is needed. This type of use of FAVAI could well prove to be valuable in ways not even considered by the researcher: to train and better prepare paraprofessionals for service in the classroom. This is yet another big success of the FAVAI course, because Maree found a way to solve a problem which many teachers like her are facing, but who might not easily find its solution because of the lack of knowledge of FAVAI for inservice teachers (Arya, Christ, & Chiu, 2014; Pryor, & Bitter, 2008). Jeremiah agrees with Maree's opinion on the effective role FAVAI played in their professional development. In his opinion, inservice teacher professional development could be greatly enhanced by FAVAI because learning is almost the like buying and selling of ideas and knowledge. In that sense, one cannot buy or sell if there is no market or an organized forum for the activity to take place. He stated the following in the post-viewing interviews:

Everybody sees things differently so I think it is more valuable to do it as a group, I think I would be narrower focused in a group discussion; I can see other people's perspectives on the very same thing. This is good for professional development...to see and hear other people's perspectives.

In his pre-interview, Jeremiah insisted on the importance of learning from colleagues, whom he said contribute new knowledge and therefore are valuable. To be a good teacher, he thought that the teacher must be a constant learner even if it is low

profiled because all interactions bring about learning of some sort. To him, the traditional professional development method of learning is not quite successful because it involves a situation whereby people are hired to come and deliver knowledge into the heads of learners who should only hear and listen. The FAVAI professional development experience was helpful because participants met and watched videos of instruction, after which everyone was involved in the teaching and learning exercise. Unlike previous professional development sessions, the participants did not have a teacher standing in front of them telling them what to do, and pouring knowledge into their empty heads (Blackburn, 2000; Roberts, 2007; Freire, 1970; Shor, 1993). Experiencing and creating new knowledge together is a more effective and a more meaningful way to learn a lesson that will render it long lasting (Vrasidas, & Glass, 2004). This is a prototypical representation of the constructivist philosophy of learning substantiating the assumption that knowledge is socially created and the successful teacher is one who creates knowledge (Denton, 2012; Ernest, 1999; Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009; Powell, 2016).

Wilma is a participant who has a lot of experience as a former high school teacher and now a teacher professional developer. She was keen to the discussions and attested to the fact that she took away a lot from the interactions. In her pre-interview, she had suggested that from her own personal experiences, that interaction is a hinge on which teacher professional development should evolve because it brings about new understandings.

Well, when I was in the classroom, I learned that often we need to put our heads together to come up with an engaging lesson. I think even just being in proximity

to colleagues is a necessity. We have an office where teachers gather... where there is a lot of exchange over both lesson approaches and over the mathematics itself.

# Assertion Three: FAVAI by the Inservice Teachers Strongly Impacted them and could Possibly Affect their Students as Well

The final assertion resulting from this study points to the fact that FAVAI helps teachers to create knowledge, new methods, and deeper understandings, which have the capability of impacting both their instruction and the learning. This aligns with the constructivist assumption of reality, which states that that reality is constructed through human activity, and that members of a society are capable of creating components of what would become the reality of their world. This suggests that the participants' discussions and the results of the findings from a research become new realities (Kukla, 2000).

Among the possibilities emanating from this study is the understanding that the use of FAVAI by inservice teachers provides a new forum through which teachers share knowledge, as well as brings to light an indirect way of impacting students' learning and academic progress (Darling-Hammond,2000; Darling-Hammond, & Snyder, 2000; Bennett, 2015). Concepts and ideas that were not as familiar became more familiar after this professional development activity as teachers became more motivated and better equipped to help students. The sharing was rich and the participants were anxious to take their learning back to their classrooms right away! During the focus group interviews, one of the strong points that came up was the fact that teachers agreed that coming together to develop themselves professionally was as important to them and also had the

potential to impact their students. This fell under the rationale that good teachers would make good learners. Agnes, for instance, stated that:

"When teachers get better equipped for work, the students are more likely than not to be high achievers."

By this, Agnes meant that the meetings and analyzing videos of instruction improved their teachers' ability to teach. Findings that participants' improvement impacts the learners aligned with Pekrun Elliot, & Maier (2009) who found that students who were motivated and who enjoyed the lessons, became high achievers. While understanding that the teacher is not the sole panacea to students' success, and that there are other factors that lead to students' achievement like nutrition, effort, motivation, and peer influence, teacher professional development affects student achievement in its own way (Darling-Hammond, 2000; Schmoker, 2004; Guskey, 2002). This can be seen at three levels. First, professional development enhances teacher knowledge and skills. Second, better knowledge and skills improve classroom-teaching practices. Third, improved teaching raises student achievement. If one link is weak or missing, improved student learning cannot be expected. According to Yoon, Duncan, Lee, Scarloss and Shapley (2007), "if a teacher fails to apply new ideas from professional development to classroom instruction, for example, students will not benefit from the teacher's professional development" (p. 4).

This supports the claim that well trained teachers will become the source of stimulation and motivation for student learning and consequentially, success. Other research has identified teacher's professional development as an important element in improving the quality of students' learning because teachers become content focused,

active learners, and coherent participants in collective learning which, in turn, increases intrinsic motivation in the students (Desimone, 2009; Guay, Valois, Falardeau, & Lessard, 2015). Wilma, herself a teacher professional developer in the school district, confirmed these findings stating that:

FAVAI for inservice teachers would improve student learning outcomes because teachers would have the opportunity to reflect deeply on various teaching strategies, whether they are effective or not, and why. FAVAI for inservice teachers also helps teachers develop a common understanding of effectiveness.

As Wilma suggests, the effectiveness of teachers is translated to and measured by student learning success because the students should be the top beneficiary of teacher efficacy (Pekrun, Elliot, & Maier, 2009; Frenzel, Goetz, Ludtke, Pekrun, & Sutton, 2009). After all, there would be no teachers without students, and the greatest desire of every conscientious teacher should be the success of their students. The findings from this study suggest that utilize FAVAI for inservice teachers can have very positive effects on the teacher and students. Jeremiah, one of the participants who could not wait to start implementing the lessons from the FAVAI passionately described the role of FAVAI in classroom management:

Classroom management to me is the logical connection between students, activities and time. If I had such [FAVAI] opportunities in the past, or if I continue to have such opportunities, I will become a more complete teacher than I am.

In this study, as I mentioned previously, one of the potentially negative consequences of FAVAI is the misunderstanding of videos of instruction and the mistaking of it to be used

as an independent interventional tool on teaching practices (Masats, & Dooly, 2011). Based on the responses of participants, the FAVAI experience was found to be very productive as long as it remained a forum for an exchange of ideas as opposed to considering it as the main intervention itself without the facilitation. Participants indicated that if the facilitation and sharing were absent from the course, participants would be prone to learning some of the negative aspects of video of instruction. This emphasizes the fact that videos of instruction are not the end in itself but a means to an end.

Superficial learning sometimes results in what I call negative learning. This is a situation where instead of learning what the lesson entails, the teacher focuses instead on what is not intended for learning that should actually be avoided in a classroom situation. Initially, I presumed that all videos of instruction would have a lesson to teach because while a good video would teach effective pedagogy. The bad ones, I thought, would be useful for giving the participants more to discuss and critique making it a motivational ingredient for group discussions. On the contrary, data suggested that the participants were vigilant to the consequences of poor teaching. Participants feared that viewing videos with poor instruction could teach negatively as Wilma suggests:

There was also the possibility of learning bad teaching methods from poor teachers who featured in the videos. I can say, to be honest with you, I say more structured teaching than what I would take to my classroom. Nonetheless, the scaffolding came from the analysis activities.

This means that the teachers ran the risk of learning what should not be learned because exposing them to bad teaching seems to be synonymous to the promoting of poor

teaching, as found by Masats, & Dooly (2011). Wilma believed strongly, like her peer participants, that the exercise was great but still feels that there were some aspects of it that could be negative to the teacher.

"A teacher who is not really grounded in teaching could be easily misled by some of the teaching in the videos. Look at the highly structured teaching and the teacher-centered stuff!"

In spite of the potential weaknesses of video as an instructional modeling instrument, the teachers remained grateful that their eyes have been opened to a new way of assessing their own teaching. Jeremiah shared similar views. Videos of instruction without analysis could have a negative effect on the novice teacher or even the inservice teacher who is not grounded in a teaching philosophy. One of the ways this could occur is when the lesson is not the focus. During video viewing, some teachers could miss the primary intentions of the video. Instead of concentrating on what they should look out for, they might focus on petty talking like admiring the manner in which the classrooms in the video is equipped and comparing them with theirs. The clothing or other aspects virtual teacher may be a distraction to some of the teachers. According to Jeremiah, "Video analysis has the potential to bring damaging habits to light as well as highlight effective instruction being practiced."

Jeremiah's statement about bringing damaging teaching habits to light could be misleading, if the viewing teachers copy the "damaging habits" in the video. Normally it is said that one should not teach damaging or negative content, for that might paradoxically be what learners take home instead. Jeremiah clarified his conviction that "if the videos are not well selected—and I know it could be a very difficult thing to do—

the exercise may be a waste of time particularly if teachers come back learning what they should not learn."

Carine explained that she thought the video analysis opportunities were terrific, but that using the videos in isolation would not be very helpful. This underscores the fact that to render the activity successful, it should not be designed like an interventional exercise or video modeling. Instead, it should be a video analysis of instruction experience because the learning and exchange come from the group discussions. The data findings of this study were consistent with other researchers such as Sherin, & Han (2004); and Sherin (2004). She noted, "I learned a lot from the video analysis but sometimes I did not know what to take from the videos. Some teachers were doing a rigmarole most of the time and I wondered what they were doing." This attests to the fact that learning comes from the sharing of ideas during analysis and not from the videos alone. On their own, videos cannot provide the scaffolding experience expected of the professional development activity.

It is commonplace to hear that videos of instruction are abundantly available online but getting those that are well designed to improve teachers' professional development is somewhat rare. Like journal articles, one needs to conduct a thorough search to find them. It is true that YouTube<sup>TM</sup> contains all sorts of videos, but videos of instruction of high quality are few on this channel. Searching on YouTube<sup>TM</sup> can be very laborious because of the abundance and variety of videos, but anyone who is patient enough and puts in the required long hours of search is likely to come out with some fascinating videos from there. Otherwise, the Teaching Channel<sup>TM</sup> is reserved for videos for teacher professional development. It deals with new teachers as well as veteran

teachers. There is also the Marzano teaching video channel featuring Marzano's instructional strategies, which has some good videos of instruction. For this study, long videos were avoided because they could be tiresome and additionally, may contain too much information to be captured at a sitting.

The videos selected for this study were between 10 and 15 minutes long, so that the participants could easily remember the details to articulate them. In addition, the length of the videos is very important given that teachers were coming from working all day in their various classrooms. Given the size of the group, a longer video could be very cumbersome and would take time from the discussions. There are a variety of videos on almost any subject so videos were specific to the topic taught. Classroom management videos were used for that topic while motivational videos were used in teaching motivation. I informed the participants beforehand what the next topic was going to be and they came prepared to gain a new understanding of it. These were all the key factors that contributed to the success of the course.

In conclusion, the results of this study suggested that FAVAI is effective for inservice professional development based on the responses of the teacher participants and the existent literature. This specific effectiveness depends exclusively if the video is used to set the context for group discussions and analysis, but if teachers decided to watch videos on their own without analyzing in a group, the videos might not teach the intended skills proficiently. Instead, superficial, less beneficial, and even damaging practices could be learned from viewing videos of instruction in isolation.

# **Concrete Connections and Unexpected Findings**

The final way in which this study found FAVAI to invigorate learning among inservice teachers was by emphasizing the value of community learning as a major catalyst of teacher professional development as recommended by DuFour (2004). Through this study, it is clear that learning is better pursued in a group than individually, aligning with Vygotsky's Social Learning Theory. This study also painted a succinct and clear picture that defined the connections between motivated teachers and motivated students. When teachers are well developed professionally, the students under these teachers are bound to feel the impact in the same way as poorly trained teachers' impact their students' poor learning outcomes. For instance, when teachers find that learning in a group has many advantages; they are likely going to assign their students to learn ingroup as well to reap similar results, thus fostering the constructivist ideology of learning and teaching as a social activity.

According to Vygotsky (1978), students are capable of performing at higher intellectual levels when asked to work in collaborative groups than when asked to work independently. This is because group diversity in terms of knowledge and experience contributes positively to the learning process (Saunders, & Batson, 1999). Cooperative learning methods have the potential to improve problem- solving strategies because the students are challenged with different interpretations and understandings of the given situation, problem or issue. The peer support system makes it possible for the learner to internalize both external knowledge and critical thinking skills and to convert them into tools for intellectual operations, and students who participated in collaborative learning

had performed significantly better on the critical thinking test than students who studied individually (Bruner, 1985; Gokhale, 1995; Bennett, 2015).

In this study, I did not expect that participants would passionately and unanimously agree on the classroom observation method which inservice teacher professional development has depended upon for a very long time. It turned out not to be as productive as school administrators and other stakeholders believe. Participants said that their professional development activities are plagued by several shortfalls, making it less effective; criticized classroom observation as a nonfunctional exercise. First, they complained that there is no frank discussion or analysis of the lesson observed, so the learning is taken out of the activity, rendering it unauthentic. Second, they said it is a very distractive professional development exercise, which is also very difficult to schedule because of teacher availability. When it get scheduled, observing teachers tend to get engulfed in helping the class teacher in supervising the students, which makes it difficult to attentively observe and learn from the observation experience. Another unexpected finding of the study was that teachers linked FAVAI to collaboration, which is consistent with Hennessy, & Deaney, (2009). They said the professional development activity caused some bonding to occur between them and this promoted their understanding of each other and discussions.

The existing literature says that classroom observation has been the most successful link between theory and practice for beginning teachers. It helps teachers to gain some experiences by observing teachers that are more experienced or mentors at work. Comments by observers can also help to reform the teacher being observed. A

principal or any colleague who observes another gains some knowledge of self-awareness and become conscious of their own practice (Wichadee, 2011).

Nonetheless, this practice can be intimidating for the observed teacher having to expose themselves to critiques (Ali, 2007). In some settings, classroom observation is often used as a medium for assessing the teacher and this can present a threat to the teacher's confidence (Cosh, 1999). The relationship between teacher observation and teacher professional development has been found to be very fragile as the teacher in question, sometimes rejects sometimes critiques and suggestions of observers (Crandall, 2000; Wang & Day, 2002). At times, a teacher could try to put on their best performances while being observed, after which they return to previous, more informal and relaxed practices because of the little impact observation had on them.

Waxman and Padron (2004) consider classroom observation to have many downsides such as the focus being on the teacher, while neglecting other factors that impact the lesson. The teacher-focused observation often ignores student behaviors, which have much influence on the success of the lesson. Teachers often do not give observers the opportunity to examine individual students to find out their economic, racial, cultural, gender, language and achievement backgrounds, which are also significant factors in the teaching and learning process. The threat that accompanies this practice can be over bearing on the observed teacher. The teacher who is being observed knows she/he is the focal point and so perpetually feels like she, or he is being exposed. The solution Waxman and Padron (2004) propose as a remedy to this shortcoming of classroom observation is to divert attention from the teacher to the students and so these researchers coined the Classroom Observational Schedule (COS) method which was

designed to collect data on particular students' or sets of students' classroom interactions and behaviors throughout the semester for analysis.

The COS data was recorded on video and watched by the researchers for analysis. This was found to improve students' success rate, as the teachers were able to pinpoint the various distractions and pitfalls of the learners on the videos. The COS method still suffered from the problem of focus. The classroom observers must be focused to get desired results from the experience. This is crucial because we have seen how the students get them distracted, so classroom observations are still not the panacea. Worse still, the observations are done within intervals of 30 seconds, meaning that the observer has to be juggling between the timer and the observation (Waxman, & Padron, 2004).

# **Implications for Practice**

The purpose of this study was to investigate the usefulness of FAVAI to inservice teacher professional development. My findings supported Borko, Jacobs, Eiteljorg, & Pittman (2008), suggesting that the use of FAVAI by inservice teachers can be an inspiring experience that is better than most of other professional development approaches in use today. FAVAI provides the platform for inservice teachers to share their understandings and mastery of effective teaching. Inservice teachers are the branch of teachers who have been largely overlooked and viewed as specialists who are already experts who can help themselves. Much is being done for preservice teachers, who are considered the novices of the profession; whereas, inservice teachers have their own challenges, which warrant attention.

Inservice teacher challenges include having to teach large groups of students, as needed additional funding to support more classes is not forthcoming. FAVAI helps

prepare the teacher pedagogically, especially in classroom management, which can enable them to better cope with the large numbers. Watching and analyzing another teacher managing a big class is a good way of learning how to tackle the challenge of large classes (McKeachie, 2007; McKeachie, & Svinicki, 2013). This also applies to the problem of technology. Technology has evolved to help enhance teaching and learning, but to some extent, it can an obstacle to teachers. Students love video games and social media communication in such a way that this is encroaching into teaching and learning as some students continue using their iPads even when the lesson is going on. This behavior becomes a major distraction that can interfere with student success. Even with the lack of time to independently research, the problem could be minimized by simply working in a community of FAVAI teachers handling this challenge (Wayne, Yoon, Zhu, Cronen, & Garet, 2008).

Poverty is one difficulty that often has negative effects on student learning and consequently may hamper the teacher from producing great results. Students from low-income homes have been generally noted to be low achievers (Brooks-Gunn, & Duncan, 1997; Pellino, 2007; Jensen, 2009). As seen in the discussion of my focus group, students from the "harder part of town" need to be handled with special tact and focus. On preparing a lesson, their background has to be taken into consideration. Teachers are reported to resign from their teaching positions because of issues with inclusion, diversity, and segregation on campuses, which make their job very difficult (Kersaint, 2007). Viewing and analyzing videos like the *Freedom Writers* by Erin Gruwell could be a fascinating exploration of possible solutions to problems arising from these issues.

To special education teachers, videos of instruction can play a significant role especially in helping train the paraprofessionals, and enhancing their adaptation to the fundamentals of the profession. As noted by one participant in this study, an experienced teacher in this department can record on video, the various daily activities that are carried out in the classroom. He or she can then upload them online for his or her paraprofessionals or other novice special education teachers to watch, analyze, and ask questions in order to have a deeper understanding of the functionality of students with special needs. A paraprofessional who views and analyzes these videos is likely to have a better understanding of the role they play than one who has not.

FAVAI has the potential to enable teachers share power in the classroom, as teachers learn and apply scaffolding in learning. After applying scaffolding, the teacher reduces the support on noticing that students exercise mastery of the concept under study. Like that, the power of decision-making in learning is gradually left in the hands of the learner as s/he is becoming independent in creating knowledge. By so doing, FAVAI reduces authoritarianism in some classrooms where some inservice teachers still struggle with sharing power with their students in a modern teaching and learning environment. Some form of direct instruction and lecturing is still very useful in the classroom, especially in complex courses, but not to the extent that the teacher becomes the omniscient authority who instead of providing scaffolding for students to construct their own knowledge; decides to provide them the knowledge (Hawes, 2004). Teachers involved in FAVAI could learn new ways to engage the students in-group or independent work where students have choices and share in the decision-making.

Lastly, teacher collaboration and reflection is a big component in the teaching and learning process, which FAVAI has handled with dexterity. With the various increasing challenges inservice teachers face; one of the ways to address them is by collaborative reflecting with fellow colleagues (Dearman, & Alber, 2005). FAVAI has the potential to harness teachers' thoughts to bring about solutions to challenging situations in the classroom. Inservice teachers can bridge the gap of not having many possibilities of observing fellow colleagues by participating in FAVAI group experience.

Rather than continue to present and deliver the inservice teacher with knowledge they need, it is necessary to give them the opportunity to interact and shape their pedagogical skills via FAVAI. In line with social constructivism, the data suggested that teachers be given the opportunity to view and analyze videos of instruction, as they could be able to share and grow in their learning processes with each other. Interactions among teachers are a great way of promoting learning and effective method change for those who may still be struggling with some aspects of teaching.

At the beginning of this study, some participants did not think that videos of instruction could enhance their professional development, could be attributed to their lack of experience with the FAVAI approach. By the end of the FAVAI discussions and activities, the participants unanimously agreed upon its value in the confidential individual surveys, they indicated that the analyzing of videos of instruction changed many aspects of their teaching and that they were ready to change several aspects of their teaching if they had not yet changed them already. These perceptions were echoed by some of the documents the participants submitted as part of the BVP course assignments. All of them also supported the implementation of FAVAI in the curriculum of teacher

professional development in their school district and beyond because of the richness that is embedded in the experience.

The results suggest that teacher collaboration gives rise to "mindfulness" in the exercise of their profession (Seidel, Pehmer, & Kiemer, 2014; van Es, E. & Sherin, 2008). These researchers also report on the premise that if teachers were able to better understand the challenges their students face, they would be able to better help the students to learn. Qualified professional teachers should be those who have developed a full understanding of their students' pitfalls and needs in their learning. FAVAI provides a highly credible experience to guide teachers to explore the students' minds, struggles, and fears.

The participating inservice teachers expressed great benefits from the FAVAI professional development experience and promised to recommend it to their colleagues if another opportunity arose. Participation in FAVAI by inservice teachers is a vibrant scaffolding activity, which provides the teachers a forum to interactively create their own knowledge and understandings via rich reflective activities, observations, and group discussions. It revives the teacher's pedagogic skills by offering an alternative for classroom observation an increasingly outdated development method which most of the time falls short of expectations. With the opportunity to exchange views and ideas without restrictions, FAVAI can essentially become a beneficial tool for inservice teachers.

Findings from this study could benefit a broad range of individuals and groups.

Teacher educators in universities could adapt the results to their local contexts for maximum benefits. Preservice teachers could have FAVAI included in their curriculum

as part of the practicum course, since classroom observation has been revealed as a weak means of providing teachers feedback regarding what is occurring in their classrooms.

Universities could also apply FAVAI to admissions of teacher candidates. That is to say, all candidates who apply to enter the teacher education department could be subjected to a FAVAI to select those that are ethically and intellectually best prepared to become teachers.

Policy makers at any level could benefit from this study in several ways depending on their needs and wants. As beneficial as it has been shown to be, policy makers could mandate FAVAI for teachers nationwide. With that, a steady professional development method is instituted. Most importantly, practicing teachers will be given the responsibility of constructing their own knowledge, learning, and reality in a learning community (Mitchell, & Sackney, 2011). With this action, collegiality and teamwork would be enhanced. This approach of professional development is unique in that it is sustainable and teachers can do it on their own. As already mentioned by one of the participants in this study, big seminars or workshops are not very necessary to have success with FAVAI. Experienced teachers can train novices through FAVAI. Also, teachers can form learning communities by frequently watching and analyzing videos of instruction.

The interactions with participants in this study indicated that it would be a positive experience for teachers to be involved in one week of FAVAI at least once per semester. In spite of their resistance to having something added to the load they may already be grappling with, the participants suggested that if FAVAI

were to substitute some of the professional development activities they were already being subjected to, they would gladly welcome the idea.

School principals could benefit from the study by requiring the different teams in their schools to make FAVAI a permanent aspect in their professional development. This means that even if it is not state or nationally instituted, individual school principals could use it to benefit their teachers and students. Consultants also have much to gain from this study. A consultant who reads this research would easily find something to take from it and to use when advising on modern professional development.

As already pointed out by one of the participants, the findings from this study indicated that FAVAI could help educate paraprofessionals in need of structured guidance. This is important because they mostly come from theoretical training that does not fully prepares them for practical realities on the field. With video featuring their local challenges, they could gain important insight by going back to watch, analyze, and ask questions for clarifications. This means that they would have the advantage to tackle difficulties before reaching them on the job. This is of particular importance since they are dealing with delicate lives of our children and youth.

School administrators and other school hiring authorities could use FAVAI as a means for interviewing and recruiting teachers. For example, a middle school needs a science teacher but five candidates apply for the position. The school can play videos of instruction and ask the candidates to analyze the video. From the points each candidate gives, the hiring authority could evaluate and recruit the teacher with the best ideas and the most contributions. This can work in the same manner for parents looking to hire a

home teacher for their children. FAVAI, if well adapted, could be used in almost every field of life!

#### **Directions for Future Research**

This study was designed to investigate inservice teachers' perceptions of FAVAI on their professional development. A group of five inservice teachers participated in the study for nearly four months during which they viewed and analyzed six videos of instruction via group discussions. This research process included pre-interviews, midcourse surveys, written documents, and post-viewing interviews. After data analysis, findings imply pathways for future research in this same domain. This social environment offered teacher participants the forum through which they constructed new knowledge by blending their skills with those of fellow participants in an interactive constructivist fashion.

The promising results of this study may support a need and desire for more research to be conducted in this field. Further research could be conducted with a larger sample size as well as a longer duration. In addition, I recommend that future research should be an experimental design to measure the potential changes in both the teachers' and students' learning. The academic performances of the students could be recorded before and after the teachers undergo FAVAI experiences and then given time afterwards to teach. The performances of the students should be recorded to be compared to determine any the differences in students' learning outcomes that could be associated with the introduction and use of FAVAI. Furthermore, this approach of facilitated video analysis of instruction can be developed into a model which would be of great pedagogical importance to students, teachers, and all school stakeholders.

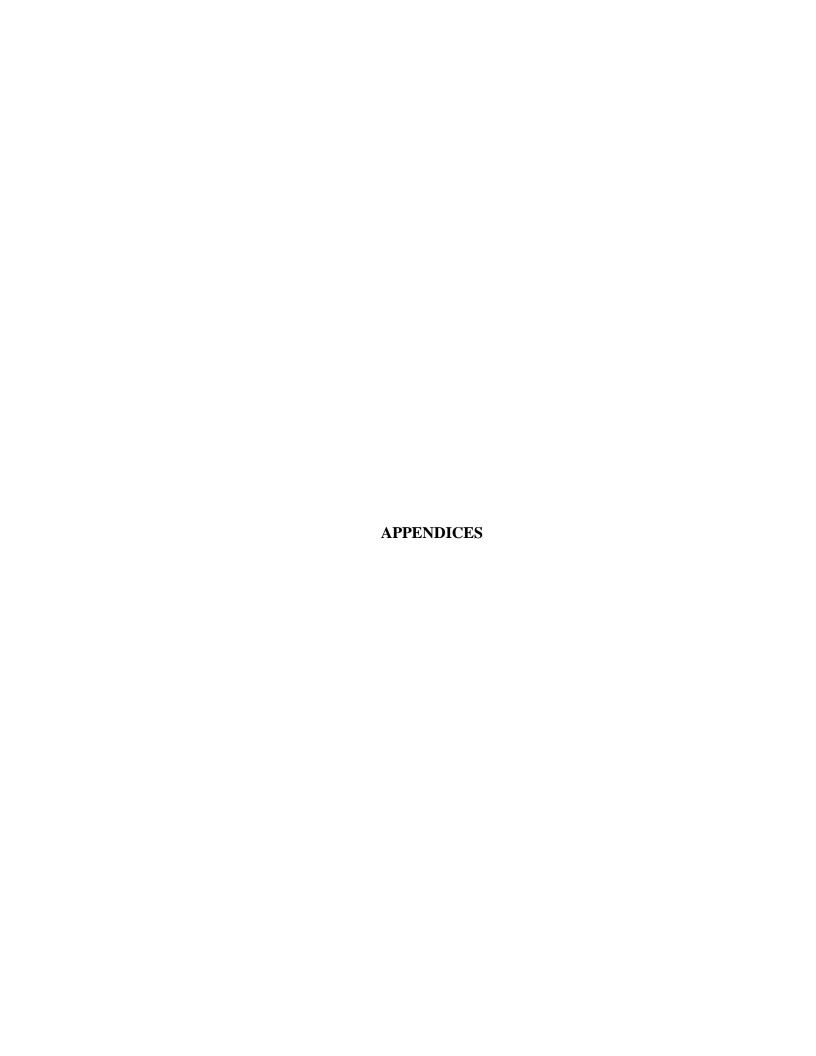
#### Conclusion

Without having phobia for criticism, I predict that teachers will enjoy FAVAI in a similar way as this study group of teacher participants did. It creates the platform on which teachers learn without losing their respect or dignity. In a top-down lecture style of professional development, the teachers are less active and interactive than in FAVAI. In addition, they may not be open to speaking opportunities without the prompting, of the FAVAI method so shy teachers will likely stay quiet. The only foreseeable challenge could be in managing larger groups. Larger groups may need more facilitators to break them down into smaller groups of 10 or less. The influence FAVAI has on inservice teacher professional development is found in the acronym FAVAI. The first power in FAVAI is that it is *facilitated*. When teachers have a guide to help them navigate through a video, better learning is assured. The second is that it is *instructional*. Teachers are sensitive to teaching and when they see someone else teaching, they begin to scrutinize to see what differences exist between themselves and what they were watching. The third aspect of FAVAI that makes it good for teacher professional development is the aspect of audiovisual-combining action and voice into the *video*. Learning becomes like watching a movie and Hooks (2006) says learning is engaging when embedded in video and movies. Lastly, FAVAI is built around the power of *analysis*. Teachers would learn less from individually watching a video of instruction, but when they watch the videos and analyze in a group, the social climate brings about community where knowledge, reality and learning are all constructed for the benefit of each participant.

Table 4. Themes and Assertion.

	THEMES	ASSERTIONS	
Q1 Q2(a)	-Scaffolding experience.  -Mutual learning	"FAVAI by the inservice teachers provided a scaffolding experience and enhanced their mutual learning in them."	
	-Teacher reflection	"The inservice teacher reflections during FAVAI intuitively yielded new knowledge."	
Q2(b)	-Consequential impact -Classroom management -Power of analysis	"FAVAI by the inservice teachers strongly impacted them and could positively affect their students."	
		Final assertion  Judging by the fact that teachers' stances on the role of FAVAI to support their professional development evolved over time, this study asserts that:	
		FAVAI use by the inservice teachers served as a forum for scaffolding activities, which provided the teachers the opportunity to interactively create their own knowledge and understandings via rich reflective activities, and collaborations. It revived the teachers' pedagogic skills by offering an alternative to the long practiced method of classroom observation which most of the time is short of expectations. With the rare possibility to exchange their views and ideas without restrictions, judging from their experience, FAVAI can become a potent pedagogical activity for the professional development of inservice teachers.	

The use of facilitated video analysis of instruction by inservice teachers provides a unique scaffolding activity that was appreciated by all participants. It provided the teachers with the platform to bond and team up for lifelong learning. When teachers view and analyze videos of instruction, they could gain by enriching and refreshing their skills as they become better able to reflect together as a community of learners. Due to the significant supportive attributes of FAVAI to inservice teacher professional development, FAVAI has the potential to revitalize teachers in ways that the renewal of teaching skills could potentially translate into student improvement of learning. FAVAI is most effective when teachers avoid using video of instruction in isolation, but rather incorporate interactive analysis among a group seeking professional development to attain the most beneficial outcomes.



# APPENDIX A

# REQUEST TO CONDUCT RESEARCH IN THE GRAND FORKS PUBLIC SCHOOLS

## Request to Conduct Research in the Grand Forks Public Schools

December 9th, 2015	Name:		Phone:
December 9th, 2013	Benson Bak	kabaka	701-777-9410
Fax or Email:	<u>'</u>		Research Advisor:
Benson.bakabaka@ndu	ıs.edu		Dr. Mark Guy; Email:
Address:			mark.guy@und.edu
			College or Dept.:
304 State St. Grand For	rks, North Dako		
			Teaching & Learning
Research Title:			
TEACHER IMPRESS	SION OF VIDE	EO ANALYSIS ON TEACHER PROF	TESSIONAL DEVELOPMENT.
TENCHEN INTERNED	32011 01 1121	o Alvantino	ESSIGNAL DE VISEOT MENT
		rch. Attach additional papers if nece	ssary. Please attach sample copies of
		munications to be used:	oup of 6-10 teacher from across different
		lass, and giving them the opportunity of	
		of the study is to investigate teachers' in	
professional developme	ent especially in	the light of growth. Through qualitative	methods, the research will focus on
documenting participan	its' professional	development after the analysis and how	this may impact their teaching.
NR. Labready have a nr	ofessional relati	onship with Schroeder Middle School fo	or this is the school where I did my
		of and administration of the school will	
hold this research.			
Number of students no	ceded for	Number of teachers needed for	Grade Level or Dept.:
Number of students no research:	eded for	Number of teachers needed for research:	Grade Level or Dept.:
	eeded for	research: About 6-10 Teachers irrespective of	Grade Level or Dept.: N/A
research: N/A		research: About 6-10 Teachers irrespective of department or level taught.	_
research: N/A What schools are you	interested in co	research: About 6-10 Teachers irrespective of department or level taught. nducting the research in?	N/A
research: N/A What schools are you	interested in co	research: About 6-10 Teachers irrespective of department or level taught.	N/A
research: N/A What schools are you A cross-section of teach	interested in co	research: About 6-10 Teachers irrespective of department or level taught. nducting the research in? s schools in the Grand Forks school dist	N/A
research: N/A What schools are you A cross-section of teach Will confidential reco	interested in co ers from variouseds be required	research: About 6-10 Teachers irrespective of department or level taught. nducting the research in?	N/A

Assistant Superintendent Signature:

Approved:

Assistant Superintendent Signature:

Approved to conduct research in the fallowing chools:

Approved to conduct research in the fallowing chools:

Send completed form to: Grand Forks Public Schools, Box 6000, Grand Forks, ND 58206-6000 Attn: Assistant Superintendent's Office

#### APPENDIX B

# THE UNIVERSITY OF NORTH DAKOTA CONSENT TO PARTICIPATE IN RESEARCH

**TITLE:** Teacher perceptions of facilitated video analysis of instruction in teacher professional development.

**PHONE** # 701-777-9410

**DEPARTMENT:** Teaching & Learning

#### STATEMENT OF RESEARCH

A person who is to participate in the research must give his or her informed consent to such participation. This consent must be based on an understanding of the nature and risks of the research. This document provides information that is important for this understanding. Research projects include only subjects who choose to take part. Please, take your time in making your decision as to whether to participate. If you have questions at any time, please ask.

#### WHAT IS THE PURPOSE OF THIS STUDY?

You are invited to participate in a research study about teachers' impression after viewing and analyzing videos of instruction other teachers' lessons. This invitation to you is because you have put in at least a year or two of teaching.

The purpose of this research study is thus to investigate teachers' impression of video analysis of other teachers. It is thought that, if teachers come together in a focus group to view and analyze the video lessons of neutral teachers, they might learn several things from the exercise like sharing their professional knowledge and skills. If teachers find this a beneficiary exercise then, this might help improve students' learning outcomes.

## HOW MANY PEOPLE WILL PARTICIPATE?

Approximately 10 people will take part in this study from the Grand Forks school district.

#### HOW LONG WILL I BE IN THIS STUDY?

Your participation in the study will last for two to three months.

#### WHAT WILL HAPPEN DURING THIS STUDY?

During this study, I as the main researcher, will interact with a small group of participants who are selected teachers from a professional development class (PRISM). There will be interviews and viewing and analyzing videos with the intension of investigating teachers' impression about such an exercise. There are four phases to this study. Phase one is an individual pre-interview. Phase two, participants will view a video of a neutral teacher's lesson. For the third phase, participants will discuss the lesson just viewed on the video.

Phases two and three will be repeated five times over several weeks. Each video will be 10-15 minutes long and discussions of each video in a small focus group will last 30 minutes. In phase four, participants will complete a confidential survey about their impression of the video analyzing exercise on their professional development. The interviews and discussions will be recorded in audio for transcription. There will be no experimental procedures in this study. The interviews, discussions, and survey will be administered by the main researcher.

#### WHAT ARE THE RISKS OF THE STUDY?

There are no foreseeable risks to participating.

#### WHAT ARE THE BENEFITS OF THIS STUDY?

Participants will experience an educational innovation first hand. They will be able to interact and share their knowledge in new and exciting ways. Participating in this study can possibly motivate collaboration among participating teachers. Educators in general will gain new understandings of how video analysis can serve as a potential catalyst for teacher collaboration.

#### WILL IT COST ME ANYTHING TO BE IN THIS STUDY?

You will not have any cost for being in this research study.

#### WILL I BE PAID FOR PARTICIPATING?

You will not be paid for being in this research study.

#### WHO IS FUNDING THIS PROJECT?

The University of North Dakota and the research team are receiving no payments from other agencies, organizations, or companies to conduct this research study.

#### CONFIDENTIALITY

The records of this study will be kept private to the extent permitted by law. In any report about this study that might be published, you will not be identified. Your study record may be reviewed by Government agencies, the UND Research Development and Compliance office, and the University of North Dakota Institutional Review

Any information that is obtained in this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of use of pseudonyms and coding of data which will be safely kept in a safe not reachable by any other person but me, Benson Bakabaka. No one else will have access to the data.

If we write a report or article about this study, we will describe the study results in a summarized manner so that you cannot be identified.

After the recordings I, Benson Bakabaka will present the material to all the participants to listen and accept that all what they carry is their impressions about the topic discussed. In case any part (s) of the data needs be edited, that will be done to the satisfaction of the participants in question.

#### IS THIS STUDY VOLUNTARY?

Your participation is voluntary. You may choose not to participate or you may discontinue your participation at any time without penalty or loss of benefits to which you are otherwise entitled. Your decision whether or not to participate will not affect your current or future relations with the University of North Dakota

If you decide to leave the study early, we ask that you send a simple email to Benson Bakabaka and that will be enough for a change.

# **CONTACTS AND QUESTIONS?**

The researcher conducting this study is Benson Bakabaka. You may ask any questions you have now. If you later have questions, concerns, or complaints about the research please contact Benson Bakabaka at 701-777-9410 or UND adviser Mark Guy at 701-777-3139 during the day and after hours.

If you have questions regarding your rights as a research subject, you may contact The University of North Dakota Institutional Review Board at (701) 777-4279.

- You may also call this number about any problems, complaints, or concerns you have about this research study.
- You may also call this number if you cannot reach research staff, or you wish to talk with someone who is independent of the research team.
- General information about being a research subject can be found by clicking "Information for Research Participants" on the web site: <a href="http://und.edu/research/resources/human-subjects/research-participants.cfm">http://und.edu/research/resources/human-subjects/research-participants.cfm</a>

I give consent to be	e audiotaped dur	ing this study.		
Please initial:	Yes	No		
I give consent to b	e videotaped duri	ng this study.		
Please initial:	Yes	No		
I give consent for 1	ny quotes to be u	sed in the researcl	ı; however I <u>will not</u> be identi	fied.
Please initial:	Yes	No		
			a explained to you, that your que is study. You will receive a cop	
Participant's Name	:			
Signature of partici	pant		Date	_
I have discussed the	e above points with	n the participants.		
Signature of Person	Who Obtained Co	onsent	Date	_

#### APPENDIX C

#### INTERVIEW PROTOCOL

Teacher perceptions of facilitated video analysis of instruction in teacher professional development.

- I. Digital voice recorder tested and spare batteries available.
- II. Verify consent form has been signed
- III. The same questions were asked every of the five participants
- IV. Review purpose of the interview.

The purpose of this study is to investigate the usefulness of facilitated video analysis of instruction in teacher professional development.

## **Interview Questions prior to viewing clips of videos of instruction:**

- 1). What are your expectations from this FAVAI course?
- 2). Explain how often you use videos of instruction in your professional development?
- 3). What is the role of video analysis of instruction in your teaching?
- 4). What is your experience learning from your peers?
- 5). In what ways can students benefit from teachers' video analysis of instruction exercise?
- 6). What factors render video analysis of instruction by teachers important for teacher professional development? Please state as many as you know.

# **Sample probing Questions**

What caused you to...

Do you mean that...

Why do you think...

Will I be right if I say...

Describe a typical...

Explain what you...

Closing interview:

Be assured of confidentiality

I will need your help in member-checking latter on

Do you have any question?

Thank you

# Teacher perceptions of facilitated video analysis of instruction in teacher professional development.

- I. Digital voice recorder tested and spare batteries available.
- II. Verify consent form has been signed
- III. The same questions were asked every of the five participants

#### IV. Review purpose of the interview.

The purpose of this study is to investigate the usefulness of video analysis of instruction to inservice teacher professional development.

## **Interview Questions after viewing video clips of instruction:**

- 1). Before you took this course you had your definition of FAVAI, how has that definition changed after taking the course?
- 2). What does video analysis of instruction by teachers mean to you?
- 2). How can you differentiate between just viewing a video of instruction alone and viewing and analyzing it in a group with fellow colleagues?

- 3). What did you not like from the videos of instruction we watched? How would you correct those aspects of teaching in your class room?
- 4). Explain what you would do differently in your classroom because of this video analysis of instruction experience.
- 5). Describe the role you think video analysis of instruction plays in teacher professional development.
- 6). Why should video analysis of instruction be included or not included in the inservice training curriculum? Please, explain your reasons.
- 7). In what ways is video analysis of instruction different from classroom observation?
- 8). Is there anything about video analysis of instruction you would like to share that I have not asked
- 9). Do you have any question about video analysis of instruction and teacher professional development? Please, ask!

#### Written assignment task.

Do you believe facilitated video analysis of instruction has some strengths that face-to-face instruction lacks? What are these strengths?

#### ANONYMOUS PRISM MIDCOURSE ONLINE SURVEY QUESTIONS

- 1. Why did you register for this course? (Give all reasons)
- 2. How successful is the course in meeting with your aspirations?
- 3. What would you want to change in your teaching next year?
- 4. Does video analysis of instruction by teachers merit a place in the inservice training Curriculum?
- 5. How useful do you think video analysis is for teacher professional development?

- 6. Would you recommend this course to your colleague? Why?
- 7. What new thing have you learned in this course so far?
- 8. How can you summarize your personal impressions about video analysis of instruction on teacher professional development?
- 9. What are the pedagogic techniques from the video analysis you would like to try in your classroom?
- 10. What are the old techniques you would like to exclude from your daily practice?
- 11. Have you gained anything at all from the discussions? Explain.
- 12. What do you think your colleagues who did not take this course are missing?

## **Focus Group Probing**

Give us your general appraisal of the lesson...

Was there anything that was outstanding in the lesson...

What do you think of his/her classroom management...

What is your assessment of the students...

Can you call that a typical constructivist teacher...

How motivating was the teacher...

What reasons would you give for student poor/ good results...

Is there any aspects of the lesson you would like to try in your classroom...

Any final comments...

#### APPENDIX D

#### LIST OF CODES SUBSTANTIATING CATEGORES AND THEMES

List of codes substantiating categories and themes.

1. Category: Scaffolding experience

Definition: (Theme One) FAVAI provided scaffolding for the teachers' pedagogical

# knowledge.

Support teacher growth

Teacher change

Improved craft

New knowledge

Variety of methods

Supports teacher growth

Provides ground work for learning

A critical role

Reviewed and discussed

Choreographed to bring emotions

Takes away observer reactions

Teacher as lifelong learner

Getting new knowledge

Authentic teaching

Interesting content

Motivation

Class distractions avoided

Good professional development

#### 2. Category: Classroom management

Definition: (Theme Two) FAVAI provided a suitable platform for the BVP inservice teachers to understand classroom management.

Classroom management

Teaching techniques

Class organization

Catchphrases

Good teaching makes good learning

Better organization improves learning

Multiple teaching styles help

No learner left behind

# Time management is more learning Catchphrase

# 3. Category: Teacher reflection

Definition: (Theme Three) FAVAI initiated and sustained teacher reflection among these inservice teachers.

Authentic judgment

Think deeply of teaching

It is authentic

Honesty in criticism

Feedback is trustworthy

Authentic self-mirror

It is authentic

Feedback is trustworthy

Class distractions avoided

# 4. Category: Mutual learning

Definition (Theme Four) FAVAI provides an environment for mutual learning that exceeds what teachers found individually.

Mutual sharing

Understanding others' perspectives

Facilitate Scaffolding

Collaborative instruction

Collaborative observation

Enriching experience

Teaching others

**Bonding** 

Understanding difference

Sharing knowledge

Learning from each other

Understood others' perspectives

#### 5. Category: Impact of analysis

Definition (Theme Five) Theme Five: FAVAI had a powerful Impact on the teachers' analysis of teaching.

Over structured classes

Teacher centeredness

Student compliance

Growth through the course

Negative learning

Pleased with professional growth

New ideas

Power of analysis

Change my tone Replace observation Discussions and others' perspectives

# 6. Category: Consequential Impact

Definition (Theme six) FIVA had Consequential impacts on the inservice teachers' professional development as well as their students.

Change class management More careful More organization Teacher change More attention Improved instruction All assignment in class Limit readings Gain new thoughts Long readings are difficult More time for more videos I learned about other levels I gained diverse ideas Impact of different perspectives Improvement from analysis exercise Hands on activities Imaginary Video analysis

#### REFERENCES

- Ali, S. (2007). Reflective teacher observation model for inservice teacher trainees.

  In *English Teaching Forum* (Vol. 45, No. 1, p. 16).
- Archer, J. (1999). New teachers abandon field at high rate. *Education Week*, 18(27), 1.
- Arya, P., Christ, T., & Chiu, M. (2014). Facilitation and Teacher Behaviors: An Analysis of Literacy Teachers' Video-Case Discussions. *Journal of Teacher Education*, 65(2), 111-127. Doi: 10.1177/0022487113511644.
- Attride-Stirling, J. (2001). Thematic networks: an analytic tool for qualitative research. *Qualitative research*, *I*(3), 385-405.
- Baecher, L., Rorimer, S., & Smith, L. (2012). Video-mediated teacher collaborative inquiry: Focus on English language learners. *High School Journal*, 95(3), 49-61.
- Bandura, A. (1997) Self-Efficacy: The Exercise of Control. New York: Freeman
- Banks, J., Cochran-Smith, M., Moll, L., Richert, A., Zeichner, K., LePage, P., & McDonald, M. (2005). Teaching diverse learners. Preparing teachers for a changing world: What teachers should learn and be able to do, 2005, 232-274.
- Barlow, A. T., McCrory, M. R., & Blessing, S. (2013). Classroom Observations and Reflections: Using Online Streaming Video as a Tool for Overcoming Barriers and Engaging in Critical Thinking. *Online Submission*
- Beauchamp, C. (2015). Reflection in teacher education: issues emerging from a review of current literature. *Reflective Practice*, *16*(1), 123-141. doi:10.1080/14623943.2014.982525

- Beaudin, B. P., & Quick, D. (1996). Instructional video evaluation instrument. *Journal of Extension*, 34(3), 1996.
- Bell, J. (2014). Doing Your Research Project: A guide for first-time researchers.

  McGraw-Hill Education (UK).
- Bennett, T. (2015). Group Work for the Good Unpacking the Research behind One Popular Classroom Strategy. *American Educator*, 6(2015), 7.
- Berg, B. L., Lune, H., & Lune, H. (2004). *Qualitative research methods for the social sciences* (Vol. 5). Boston, MA: Pearson.
- Berk, R. A. (2009). Multimedia teaching with video clips: TV, movies, YouTube, and mtvU in the college classroom. International Journal of Technology in Teaching and Learning, 5(1), 1–21.
- Billingsley, B. S. (1993). Teacher retention and attrition-in special and general education A critical review of the literature. *The Journal of Special Education*, 27(2), 137-174.
- Blackburn, J. (2000). Understanding Paulo Freire: reflections on the origins, concepts, and possible pitfalls of his educational approach. *Community Development Journal*, 35(1), 3-15.
- Blomberg, G., Stürmer, K., & Seidel, T. (2011). How pre-service teachers observe teaching on video: Effects of viewers' teaching subjects and the subject of the video. Teaching & Teacher Education, 27(7), 1131-1140.

  doi: 10.1016/j.tate.2011.04.008
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational researcher*, 33(8), 3-15.

- Borko, H., Jacobs, J., Eiteljorg, E., & Pittman, M. E. (2008). Video as a tool for fostering productive discussions in mathematics professional development. *Teaching and teacher education*, 24(2), 417-436.
- Borko, H., Jacobs, J., & Koellner, K. (2010). Contemporary approaches to teacher professional development. *International encyclopedia of education*, 7, 548-556.
- Borrero, N. (2010). Urban school connections: A university-K-8 partnership. Catholic Education: A journal of Inquiry and Practice, 14(1), 47-66.

  doi:10.1080/1359866X.2011.614685
- Brass, E., & Coles, S. M. (2014). Artist Teachers Exchange: Reflections on a

  Collaborative Sketchbook Project for Secondary School Art

  Teachers. *International Journal of Art & Design Education*, 33(3), 365-374.

  doi:10.1111/jade.12066
- Brooks-Gunn, J., & Duncan, G. J. (1997). The effects of poverty on children. *The future of children*, 55-71.
- Brophy, J. (2004) Using Video in Teacher Education. Oxford, UK: Elsevier. Advances in Research on teaching: vol. 10
- Brophy, J. E. (Ed.). (2003). Using video in teacher education (Vol. 10). Jai.
- Brown, A. L., & Campione, J. C. (1994). *Guided discovery in a community of learners*.

  The MIT Press.
- Bruner, J. (1985). Vygotsky: An historical and conceptual perspective. *Culture*, communication, and cognition: Vygotskian perspectives, 21-34. London: Cambridge University Press.

- Brunvand, S., & Fishman, B. (2006). Investigating the impact of the availability of scaffolds on preservice teacher noticing and learning from video. *Journal of Educational Technology Systems*, 35(2), 151-174.
- Canning-Wilson, C. (2000). *Research in visuals*. Paper presented for the Video Special Interest Group at the International TESOL Arabia Conference, Hilton Ballroom, Hilton Hotel, 119-123.
- Canty-Mitchell, J. (2001). Life change events, hope, and self-care agency in inner-city adolescents. *Journal of Child and Adolescent Psychiatric Nursing*, *14*(1), 18.
- Caudle, S. L. (2004). Qualitative data analysis. *Handbook of practical program* evaluation, 2, 417-438.
- Cho, J., & Trent, A. (2006). Validity in qualitative research revisited. *Qualitative* research, 6(3), 319-340.
- Coffey, A., & Atkinson, P. (1996). *Making sense of qualitative data: complementary research strategies*. Sage Publications, Inc.pekrun
- Collin, S., Karsenti, T., & Komis, V. (2013). Reflective practice in initial teacher training: Critiques and perspectives. *Reflective practice*, *14*(1), 104-117.
- Cooper, J. M., & Allen, D. W. (1970). Microteaching: History and Present Status.
- Coles, A. (2011). Using Video and Film. *Mathematics Teaching*, (224), 33-36.

- Corriero, J., & Romeo, L. (2011). Teaching is difficult, challenging work, and learning to teach is often a daunting process in which teachers find themselves on their own with little support or encouragement. This is most evident in the initial years of teaching, as novice teachers struggle to fulfill their two major responsibilities—teaching and learning to teach (Lampert, 2010). Breaking the Mold of Preservice and Inservice Teacher Education: Innovative and Successful Practices for the 21st Century, 91.
- Cosh, J. (1999). Peer observation: a reflective model. *ELT journal*, 53(1), 22-27.
- Crandall, J. (2000). Language teacher education. *Annual review of applied linguistics*, 20, 34-58.
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into practice*, *39*(3), 124-130.
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.). Boston: Pearson.
- Creswell, J. W. (2012). Qualitative inquiry and research design: Choosing among five approaches. Sage.
- Creswell. J. W. (2007). Qualitative inquiry & research design: Choosing among five approaches. Thousand Oaks: Sage Publications.
- Dallas, F. (2006). Enhancing the 3 R's of Resilience, Retention, and Reform through Middle School Faculty Professional Learning Communities. *Middle Grades Research Journal*, 1(1).
- Danielson, C. (2011). Enhancing professional practice: A framework for teaching.

  ASCD.

- Darling-Hammond, L., & Sykes, G. (1999). *Teaching as the Learning Profession:*Handbook of Policy and Practice. Jossey-Bass Education Series. Jossey-Bass
  Inc., Publishers, 350 Sansome St., San Francisco, CA 94104.
- Darling-Hammond, L., & Bransford, J. (2007). Preparing teachers for a changing world: What teachers should learn and be able to do. John Wiley & Sons.
- Darling-Hammond, L. (2000). Teacher quality and student achievement. *Education* policy analysis archives, 8, 1.
- Darling-Hammond, L., & Snyder, J. (2000). Authentic assessment of teaching in context. *Teaching and teacher education*, *16*(5), 523-545.
- Darling-Hammond, L. (1990). Teacher professionalism: Why and how. *Schools as collaborative cultures: Creating the future now*, 25-50.
- Day, C. (1999). Developing teachers: The challenges of lifelong learning. Psychology Press.
- Denton, D. (2012). Enhancing Instruction through Constructivism, Cooperative Learning, And Cloud Computing. *Techtrends: Linking Research & Practice to Improve Learning*, 56(4), 34-41. Doi: 10.1007/s11528-012-0585-1
- DeSantis, L., & Ugarriza, D. N. (2000). The concept of theme as used in qualitative Nursing research. *Western Journal of Nursing Research*, 22(3), 351-372.
- Desimone, L. M., Porter, A. C., Garet, M. S., Yoon, K. S., & Birman, B. F. (2002).

  Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Educational evaluation and policy analysis*, 24(2), 81-112.

- Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational researcher*, *38*(3), 181-199
- Dobie, T. E., & Anderson, E. R. (2015). Interaction in teacher communities: Three forms teachers use to express contrasting ideas in video clubs. *Teaching & Teacher Education*, 47230-240. doi: 10.1016/j.tate.2015.01.003
- Dreikurs, R., Crunwald, B. B., & Pepper, F. C. (1999). Maintaining sanity in the classroom: classroom management techniques (2nd ed.). Washington, DC: Taylor and Francis.
- Danielson, C. (2011). Enhancing professional practice: A framework for teaching. ASCD.
- DuFour, R. (2004). What is a" professional learning community"? *Educational leadership*, 61(8), 6-11
- DuFour, R., & Eaker, R. (Eds.). (2010). On common ground: The power of professional learning communities. Solution Tree Press.
- DuFour, R. (2005). What is a professional learning community? In Richard DuFour, R. Eaker, & Rebecca
- Ernest, P. (March 23, 1999). Social Constructivism as a Philosophy of Mathematics:

  Radical Constructivism
- Fadde, P. J., Aud, S., & Gilbert, S. (2009). Incorporating a Video-Editing Activity in a Reflective Teaching Course for Preservice Teachers. *Action in Teacher Education*, 31(1), 75-86. Retrieved from <a href="http://search.proquest.com/docview/61818988?accountid=28267">http://search.proquest.com/docview/61818988?accountid=28267</a>

- Fenech Adami, M., & Kiger, A. (2005). The use of triangulation for completeness purposes: Triangulation in research refers to the use of multiple techniques for gathering and/or handling data within a single study. The original purpose of triangulation was to seek confirmation of apparent findings. There now appears to be support for a second purpose—completeness. This paper reviews the arguments surrounding the use of triangulation, and shows how its use facilitated one researcher's attempt to provide a complete picture of the phenomenon.... *Nurse researcher*, *12*(4), 19-29.
- Fendler, L. (2003). Teacher reflection in a hall of mirrors: Historical influences and political reverberations. *Educational researcher*, *32*(3), 16-25.
- Fong, C., & Woodruff, E. (2003). Web-based video and frame theory in the professional development of teachers: some implications for distance education. *Distance Education*, 24(2), 195-211.
- Fosnot, C. T. (2005). Constructivism revisited: Implications and reflections. *The Constructivist*, 16(1), 1-17.
- Fosnot, C. T., & Perry, R. S. (1996). Constructivism: A psychological theory of learning.

  Constructivism: Theory, perspectives, and practice, 2, 8-33.
- Fosnot, C. T., & Perry, R. S. (2005). Introduction: Aspects of Constructivism. In. CT Fosnot. *Constructivism: Theory, perspectives, and practice*, 8-38.
- Freire, P. (1970). The banking concept of education. 2004) Educational foundations: An anthology of critical readings, 99-111.

- Frenzel, A.C., Goetz, T., Ludtke, O., Pekrun, R., & Sutton, R. E. (2009). Emotional Transmission in the classroom: Exploring the relationship between teacher and student enjoyment. Journal of Educational psychology, 101 (3), 705-716.
- Fresko, B., & Nasser-Abu Alhija, F. (2015). Induction seminars as professional learning communities for beginning teachers. *Asia-Pacific Journal of Teacher Education*, *43*(1), 36-48. doi:10.1080/1359866X.2014.928267
- Friel, S. N., & Carboni, L. W. (2000). Using video-based pedagogy in an elementary mathematics methods course. *School Science and Mathematics*, *100*(3), 118-127.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American educational research journal*, 38(4), 915-945.
- Gates, Barton, Lavelle (2011) A lens on student learning. *Education Digest; vol.76 issue* 8 p. 54-58; 4p.
- Gergen, K. J. (1999). An invitation to social construction. Sage.
- Germain, C. (1986). Ethnography: The method. In P. L. Munhall & C. J. Oiler (Eds.),

  Nursing Research; A qualitative perspective (pp. 147-162). Norwalk, CT:

  Appleton-Century- Crofts.
- Glesne, C. (2011). Restudy tasks: Doing what is good for you. *Qualitative research and educational sciences: A reader about useful strategies and tools*, 1-37.
- Gokhale, A. A. (1995). Collaborative learning enhances critical thinking.

- Guay, F., Valois, P., Falardeau, É. & Lessard, V. (2016). Examining the effects of a professional development program on teachers' pedagogical practices and students' motivational resources and achievement in written French. *Learning and Individual Differences*, 45, 291-298.
- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: theory and practice*, 8(3), 381-391.
- Hamilton, E. R. (2012). Video as a Metaphorical Eye: Images of Positionality, Pedagogy, and Practice. *College Teaching*, 60(1), 10-16. doi:10.1080/87567555.2011.604803
- Hartsell, T., & Yuen, S. (2006). Video streaming in online learning. AACE Journal, 14(1), 31-43.
- Harvard Project Zero. (2003). Making teaching visible: Documenting individual and group learning as professional development: A Making Learning Visible monograph. Cambridge, MA: Harvard Project Zero.
- Hawes, J. M. (2004). Teaching is not telling: the case method as a form of interactive learning. *Journal for Advancement of Marketing Education*, 5(4), 47-54.
- Haycock, K. (1998). Good Teaching Matters: How Well-Qualified Teachers Can Close the Gap. *Thinking k-16*, *3*(2), n2.
- Hennessy, S., & Deaney, R. (2009). The impact of collaborative video analysis by practitioners and researchers upon pedagogical thinking and practice: a follow-up study. *Teachers and Teaching: theory and practice*, *15*(5), 617-638.

- Hiebert, J., Gallimore, R., & Stigler, J. W. (2002). A knowledge base for the teaching profession: What would it look like and how can we get one? *Educational researcher*, 31(5), 3-15.
- Hiebert & Grouws, 2007, (As evidence mounts that teachers have a significant impact on student learning)
- Hill, C. E., Knox, S., Thompson, B. J., Williams, E. N., Hess, S. A., & Ladany, N. (2005). Consensual qualitative research: An update. *Journal of counseling psychology*, 52(2), 196.
- Hill, Sleep, Lewis, & Ball, 2007, (As evidence mounts that teachers have a significant impact on student learning)
- Hooks, B. (2006) Cultural criticism and transformation. Retrieved from: http://www.youtube.com/watch?v=zQUuHFKP-9s
- Huba, M. E., & Freed, J. E. (2000). Learner centered assessment on college campuses:

  Shifting the focus from teaching to learning. *Community College Journal of Research and Practice*, 24(9), 759-766.s
- Huinker, D., & Freckmann, J. (2004). Focusing conversations to promote teacher thinking. *Teaching Children Mathematics*, 10(7), 352–357
- Hoaglund, A. E., Birkenfeld, K., & Box, J. A. (2014). Professional learning communities: creating a foundation for collaboration skills in preservice teachers. *Education*, *134*(4), 521-528.
- Jaworski, B. (1989). *Using classroom videotape to develop your teaching*. Informal publication. Milton Keynes, UK: Centre for Mathematics Education, The Open University.

- Jensen, E. (2009). Teaching with poverty in mind: What being poor does to kids' brains and what schools can do about it. ASCD.
- Johns, C. (2004). Becoming a reflective practitioner. Oxford, UK: Blackwell.
- Johns, C. (2009). *Becoming a reflective practitioner* (3rd ed.). Chichester: Wiley-Blackwell.
- Kersaint, G., Lewis, J., Potter, R., & Meisels, G. (2007). Why teachers leave Factors that influence retention and resignation. *Teaching and Teacher Education*, 23(6), 775-794.
- Kirkpartrick, L., Lincoln, F., & Morrow, L. (2006). Assessment of a collaborative teacher preparation program: Voices of interns. *The Delta Kappa Gamma Bulletin*, 73(1), 36-45.
- Koedel, C. (2008). Teacher quality and dropout outcomes in a large, urban school district. *Journal of urban economics*, 64(3), 560-572.
- Koelsch, L. E. (2013). Conceptualizing the Member Check Interview. *International Journal of Qualitative Methods*, 12(1), 168-179.
- Kozma, Robert B. (1991). "Learning with Media," Review of Educational Research 61 (Summer 1991): 179-211.
- Kozma, R., Chin, E., Russell, J., & Marx, N. (2000). The roles of representations and tools in the Chemistry laboratory and their implications for Chemistry learning. *Journal of the Learning of Sciences*, 9, 105-144.
- Kukla, A. (2000). Social Constructivism and the Philosophy of Science. *New York:*\*Routledge.

- Kurtz, T., Batarelo, I., & Middleton, J. (2009). Examining elementary pre-service teachers' perspectives concerning curriculum themes for video case integration.
   Educational Technology Research & Development, 57(4), 461-485. doi: 10.1007/s11423-009-9110-4
- Kurtz, T. L., &Batarelo, I. (2010). Constructive features of video cases to be used in teacher education. *TechTrends*, *54*(5), 46-53. doi:10.1007/s11528-010-0436-x
- Larrivee, B. (2000). Transforming teaching practice: Becoming the critically reflective teacher. *Reflective practice*, *1*(3), 293-307.s
- Lave J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation.

  Cambridge university press.
- LeCompte, M. D., & Schensul, J. J. (1999). Analyzing and interpreting ethnographic data. Rowman Altamira.
- Lee, J. S., Ginsburg, H. P., & Preston, M. D. (2009). Video Interactions for Teaching and Learning (VITAL): Analyzing Videos Online to Learn to Teach Early Childhood Mathematics. *Australasian Journal of Early Childhood*, 34(2), 19-23. Retrieved from http://search.proquest.com/docview/61840923?accountid=28267
- Levine, T. H., & Marcus, A. S. (2007). Closing the achievement gap through teacher collaboration: Facilitating multiple trajectories of teacher learning. *Journal of Advanced Academics*, 19(1), 116-138.
- Lewis, J. (2009). Redefining Qualitative Methods: Believability in the Fifth Moment. *International Journal of Qualitative Methods*, 8(2), 1-14.
- Little, J. W. (2003). Inside teacher community: Representations of classroom practice.

  Teachers College Record, J0S (6), 913-945.

- Malterud, K. (2001). Qualitative research: standards, challenges, and guidelines. *The lancet*, 358(9280), 483-488.
- Marsh, B., Mitchell, N., & Adamczyk, P. (2010). Interactive video technology:

  Enhancing professional learning in initial teacher education. *Computers & Education*, *54*(3), 742-748. doi: 10.1016/j.compedu.2009.09.011
- Masats, D., & Dooly, M. (2011). Rethinking the use of video in teacher education: A Holistic Approach. *Teaching & Teacher Education*, 27(7), 1151-1162. doi: 10.1016/j.tate.2011.04.004
- Marshall, C., & Rossman, G. B. (1999). The "what" of the study: Building the conceptual framework. *Designing qualitative research*, *3*, 21-54.
- Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research*. Sage publications.
- Marx, R. W., Blumenfeld, P. C., Krajcik, J. S., & Soloway, E. (2002). New technologies for teacher professional development. *Leading professional development in education*, 281-293.
- Maxwell, J. (2013). Qualitative Research Design: An Interactive Approach. Thousand Oaks, California: Sage Publications
- Maxwell, J. A. (2005). Qualitative research design: An interactive approach (2nd ed.). Thousand Oaks, CA: Sage.
- Mays, N., & Pope, C. (2000). Assessing quality in qualitative research. British medical journal, 320(7226), 50.
- Medina, J. (2011). Brain Rules: 12 Principles for Surviving and Thriving at Work, Home, and School (Large Print 16pt). Read HowYouWant. Com.

- Medina, J. (2008). Brain rules: 12 principles for surviving and thriving at work, home, and school. Seattle, WA: Pear Press.
- McFadden, J., Ellis, J., Anwar, T., & Roehrig, G. (2014). Beginning science teachers' use of a digital video annotation tool to promote reflective practices. *Journal of Science Education and Technology*, 23(3), 458-470.
- McKeachie, W. J. (2007). Good teaching makes a difference—And we know what it is.

  In *The scholarship of teaching and learning in higher education: An evidence-based perspective* (pp. 457-474). Springer Netherlands.
- McKeachie, W., & Svinicki, M. (2013). McKeachie teaching tips. Cengage Learning.
- McCurry, D. S. (2000). Technology for Critical Pedagogy: Beyond Self-Reflection with Video.
- McMahon, M. (1997, December). Social Constructivism and the World Wide Web A

  Paradigm for Learning. Paper presented at the ASCILITE conference. Perth,

  Australia.
- McMahon, M. (1997, December). Social constructivism and the World Wide Web-A paradigm for learning. In *ASCILITE conference*. *Perth, Australia* (Vol. 327).
- McMahon, M. (1997, December). Social constructivism and the World Wide Web-A paradigm for learning. In *ASCILITE conference*. *Perth, Australia* (Vol. 327).
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded source*Book (2nd ed.). Thousand Oaks, CA: Sage. Cite in DATA ANALYSIS

  COMPARISON FOR VALIDITY

- Monroe, A., Blackwell, S., & Pepper, S. (2010). Strengthening professional development partnerships while bridging classroom management instruction and practice. *The Professional Educator*, *34*(2), 1-10.
- Mitchell, C., & Sackney, L. (2011). Profound improvement: Building capacity for a learning community. Taylor & Francis.
- Motschnig-Pitrik, R., & Holzinger, A. (2002). Student-centered teaching meets new media: Concept and case study. *Educational Technology & Society*, *5*(4), 160-172.
- Moyer-Packenham, P. S., Kitsantas, A., Bolyard, J. J., Huie, F., & Irby, N. (2009).

  Participation by STEM Faculty in Mathematics and Science Partnership Activities for Teachers. *Journal of STEM Education: Innovations & Research*, 10(2), 17-36.
- Nielsen, B. L. (2015). Pre-service teachers' meaning making when collaboratively analyzing video from school practice for the bachelor project at college. *European Journal Of Teacher Education*, 38(3), 341-357.

  doi:10.1080/02619768.2014.983066
- Obradovich, A., Canuel, R., & Duffy, E. P. (2015). A Survey of Online Library Tutorials:

  Guiding Instructional Video Creation to Use in Flipped Classrooms. *Journal Of Academic Librarianship*, 41(6), 751-757. doi: 10.1016/j.acalib.2015.08.006
- Oliviero, J.L. (1965). The use of video recording in teacher education, Stanford University. (ERIC) Document reproduction service No. ED 001074
- Osmanoğlu, A., Koç, Y., & Işiksal, M. (2013). Investigation of Using Online Video Case

  Discussions in Teacher Education: Sources of Evidence of Mathematics Learning.

  Educational Sciences: Theory & Practice, 13(2), 1295-1303.

- Pearson, S., Chambers, G., & Hall, K. (2003). Video material as a support to developing effective collaboration between teachers and teaching assistants. *Support for Learning*, *18*(2), 83-87. doi:10.1111/1467-9604.00285.
- Pekrun, R., Elliot, A. J., & Maier, M. A. (2009). Achievement goals and achievement emotions: Testing a model of their joint relations with academic performance. *Journal of educational Psychology*, *101*(1), 115.
- Pellino, K. M. (2007). The effects of poverty on teaching and learning. *Retrieved July 1*, 2009.
- Phelan, M. (2003). Excellence through action: an experiential learning project (Doctoral dissertation, Lethbridge, Alta.: University of Lethbridge, Faculty of Education, 2003).
- Powell, S. R. (2016). The Influence of Video Reflection on Preservice Music Teachers' Concerns in Peer-and Field-Teaching Settings. *Journal of Research in Music Education*, 63(4), 487-507.
- Powell, K. C., & Kalina, C. J. (2009). Cognitive and social constructivism: Developing tools for an effective classroom. *Education*, *130*(2), 241.
- Porter, A. C., Garet, M. S., Desimone, L., Yoon, K. S., & Birman, B. F. (2000). Does professional development change teaching practice? Results from a three-year study.
- Porter, A. C., Garet, M. S., Desimone, L., Yoon, K. S., & Birman, B. F. (2002). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. Educational evaluation and policy analysis, 24(2), 81-112.

- Prawat, R. S., & Floden, R. E. (1994). Philosophical Perspectives on Constructivist Views of Learning. Educational Psychologist, 29(1), 37-48.
- Pryor, C. R., & Bitter, G. G. (2008). Using multimedia to teach inservice teachers Impacts on learning, application, and retention. *Computers in Human Behavior*, 24(6), 2668-2681. doi: 10.1016/j.chb.2008.03.007
- Rhine, S., & Bryant, J. (2007). Enhancing pre-service teachers' reflective practice with digital video-based dialogue. Reflective Practice, 8(3), 345-358. doi: 10.1080/14623940701424884
- Rich, P. J., & Hannafin, M. (2009). Video Annotation Tools: Technologies to Scaffold, Structure, and Transform Teacher Reflection. *Journal of Teacher Education*, 60(1), 52-67.
- Rich, P., & Trip, T. (2011). Ten Essential Questions Educators Should Ask When Using Video Annotation Tools. *Techtrends: Linking Research & Practice to Improve Learning*, 55(6), 16-24. doi:10.1007/s11528-011-0537-1
- Roberts, P. (2007). Ten years on: Engaging the work of Paulo Freire in the 21st century. Studies in Philosophy & Education, 26, 505–508.
- Rumberger, R.W. & Thomas, S.L. (2000). The distribution of dropout and turnover rates among urban and suburban high schools. Sociology of Education, 73, 39-67. 43
- Santagata, R., Zannoni, C., & Stigler, J. W. (2007). The role of lesson analysis in preservice teacher education: An empirical investigation of teacher learning from a virtual video-based field experience. *Journal of mathematics teacher education*, 10(2), 123-140.

- Saunders, N. G., & Batson, T. (1999). Cooperative Learning Strategies in Graduate Education.
- Suters, L. A. (2004). An exploratory study of the impact of an inquiry-based professional development course on the beliefs and instructional practices of urban inservice teachers.
- Schmoker, M. (2004). Learning communities at the crossroads: Toward the best schools we've ever had. *The Phi Delta Kappan*, 86(1), 84-88.
- Schön, D. A. (1991). *The reflective practitioner: How professionals think in action*. Aldershot, Hants, Engl.: Avebury.
- Seago, N. (2003). 10. Using video as an object of inquiry for mathematics teaching and learning. *Advances in research on teaching*, *10*, 259-286.
- Seidel, T., Pehmer, A. K., & Kiemer, K. (2014). Facilitating collaborative teacher learning: the role of "mindfulness" in video-based teacher professional development programs. *Gruppen dynamik und Organisations beratung*, 45(3), 273-290.
- Senge, P., Cambron-McCabe, N., Lucas, T., Smith, B., Dutton, J., & Kleiner, A. (2000).

  Schools that learn. New York: Doubleday/Currency.
- Sherin, G.M. (2008). Using video in teacher education, London, UK: Emerald Group Publishing Sherin, M. G. (2000). Viewing teaching on videotape. *Educational Leadership*, 57(8), 36-38.
- Sherin, M. G. (2001). Developing a professional vision of classroom events. Beyond classical pedagogy: Teaching elementary school mathematics, 75-93.

- Sherin, M. G. (2004). New perspectives on the role of video in teacher education. *Advances in research on teaching*, *10*, 1-28.
- Sherin, M. G., & Han, S. Y. (2004). Teacher learning in the context of a video club. *Teaching and teacher education*, 20(2), 163-183.
- Sherin, M. G., & Linsenmeier, K. van Es., EA (2006, April). Selecting video clubs for teacher learning about student thinking.
- Sherin M.G. Linsenmeir, K.A. van Es, E.A. (2009). Selecting video clips to promote Mathematics teacher discussion of students' thinking. Journal of Teacher Education, (60), 213-230
- Sherin, M. G., & van Es, E. A. (2009). Effects of Video Club Participation on Teachers' Professional Vision. *Journal of Teacher Education*, 60(1), 20-37
- Shor, I. (1993). Paulo Freire's critical pedagogy. Paulo Freire: A critical encounter, 23.
- Silvers, P. (2008). Video: A Strategy for Critical Reflection and Deeper Comprehension During Literature Discussions. *Illinois Reading Council Journal*, *36* (3), 8-17.
- Stoll, L., Bolam, R., McMahon, A., Thomas, S., Wallace, M., Greenwood, A., & Hawkey, K. (2006). Professional learning communities: Source materials for school leaders and other leaders of professional learning.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory*procedures and techniques. Newbury Park, CA: Sage Publications, Inc.

  Squires, D., & Bliss, T. (2004). Teacher visions: Navigating beliefs about literacy learning. *Reading Teacher*, 57(8), 756-763.
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory. Sage Publications, Inc.

- Suhyun, S., Malchow, A., & Jingyo, S. (2014). Why Did The Black-White Dropout Gap Widen in the 2000s? *Educational Research Quarterly*, *37*(4), 19-40.
- Taskin-Can, B. (2011). The Perceptions of Pre-Service Science Teachers Concerning

  Constructivist Perspectives To Teaching. *Journal Of*
- Tan, E., & Pearce, N. (2012). Open education videos in the classroom: exploring the opportunities and barriers to the use of YouTube in teaching introductory sociology. *Research in Learning Technology*, 19.
- Thomas, S. (2006). Professional learning communities: A review of the literature. Journal of Educational Change, 7,221-258. doi: 10.1007/sl0833-006-0001-8 Thompson, S. C, Gregg, L., 8C
- Thompson, S. C., Gregg, L., & Niska, J. M. (2004). Professional learning communities, leadership, and student learning. *RMLE Online*, 28(1), 1-15.
- Towers, J. (2007) *Using video in Teacher Education*. Canadian Journal of Learning and Technology, 33; 2
- U.S. Department of Education. (2000). Does Professional Development Change TeachingPractice? Results from a Three-Year Study, Executive Summary (Report).Washington D.C.
- van Es, E. A., & Sherin, M. G. (2008). Mathematics teachers' "learning to notice" in the context of a video club. *Teaching & Teacher Education*, 24(2), 244-276. doi: 10.1016/j.tate.2006.11.005
- van Es, E. A. (2012). Examining the development of a teacher learning community: The case of a video club. Teaching and Teacher Education, 28(2), 182-192.

  doi: 10.1016/j.tate.2011.09.005

- van Es, E. A., Tunney, J., Goldsmith, L. T., &Seago, N. (2014). A framework for the facilitation of teachers' analysis of video. Journal of Teacher Education, 1–17. doi:10.1177/0022487114534266.
- van Es, E. A., & Sherin, M. G. (2010). The influence of video clubs on teachers' thinking and practice. *Journal of Mathematics Teacher Education*, 13(2), 155-176.
- van Es, E. A., & Sherin, M. G. (2008). Mathematics teachers' "learning to notice" in the context of a video club. *Teaching & Teacher Education*, 24(2), 244-276. doi: 10.1016/j.tate.2006.11.005
- Vaughn, P., & Turner, C. (2016). Decoding via Coding: Analyzing Qualitative Text Data through Thematic Coding and Survey Methodologies. *Journal Of Library Administration*, 56(1), 41-51. doi:10.1080/01930826.2015.1105035
- Vrasidas, C., & Glass, G. V. (2004). Teacher professional development. Online professional development for teachers, 1-11.
- Vrasidas, C. (2000). Constructivism versus objectivism: Implications for interaction, course design, and evaluation in distance education. *International Journal of Educational Telecommunications*, 6(4), 339-362.
- Vrasidas, C. (2000). Constructivism versus objectivism: Implications for interaction, course design, and evaluation in distance education. *International Journal of Educational Telecommunications*, 6(4), 339-362.
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes.* Cambridge: Harvard University Press.
- Vygotsky, L. S. (1980). Mind in society: The development of higher psychological processes. Harvard university press.

- Wang, M. C. (1993). Inner-City Students at the Margins. Chicago
- Waxman, H. C., & Padron, Y. N. (2004). The uses of the Classroom Observation

  Schedule to improve classroom instruction. *Observational research in US*classrooms: New approaches for understanding cultural and linguistic diversity,

  72-96.
- Wayman, J. C. (2002). Student Perceptions of Teacher Ethnic Bias: A Comparison of Mexican American and Non-Latino White Dropouts and Students. *High School Journal*, 85(3), 27.
- Wayne, A. J., Yoon, K. S., Zhu, P., Cronen, S., & Garet, M. S. (2008). Experimenting with teacher professional development: Motives and methods. *Educational researcher*, *37*(8), 469-479.
- Wei, R. C., Darling-Hammond, L., Andree, A., Richardson, N., & Orphanos, S. (2009).
  Professional learning in the learning profession: A status report on teacher development in the US and abroad. Dallas, TX: National Staff Development Council.
- Wentzel, K. R. (2002). Are effective teachers like good parents? Teaching styles and student adjustment in early adolescence. *Child development*, 73(1), 287-301. White, I. (2010). A Simple, Low-Cost Stereographic Video Capture and Viewing Solution for Teaching Psychomotor Skills Using Online Delivery. *British Journal of Educational Technology*, 41(3), 420-431. Retrieved from http://search.proquest.com/docview/742868167?accountid=28267
- Wichadee, S. (2011). Professional development: A path to success for EFL teachers. *Contemporary issues in education research*, 4(5), 13.

- Wilde, J. (2004). Definitions for the No Child Left Behind Act of 2001: Scientifically-Based Research. *National Clearinghouse for English Language Acquisition and Language Instruction NCELA*.
- Wragg, T. (2013). An Introduction to Classroom Observation (Classic Edition).

  Routledge.
- Xiong, W. (2013). A Potential Approach to Support Pre-Service Teachers' Professional Learning: The Video Analysis of the Authentic Classroom. *Online Submission*,
- Yerrick, R., Ross, D., & Molebash, P. (2005). Too close for comfort: Real-time science teaching reflections via digital video editing. *Journal of Science Teacher Education*, 16(4), 351-375.
- Yoon, K. S., Duncan, T., Lee, S. W. Y., Scarloss, B., & Shapley, K. L. (2007).

  Reviewing the Evidence on How Teacher Professional Development Affects

  Student Achievement. Issues & Answers. REL 2007-No. 033. Regional

  Educational Laboratory Southwest (NJ1).
- Zhang, M., Lundeberg, M., Koehler, M. J., & Eberhardt, J. (2011). Understanding affordances and challenges of three types of video for teacher professional development. *Teaching and Teacher Education*, 27(2), 454-462. Chicago
- Zeichner, K., & Liu, K. Y. (2010). A critical analysis of reflection as a goal for teacher education. In *Handbook of reflection and reflective inquiry* (pp. 67-84). Springer US.